Inleiding Informatiekunde

Instructor

- John Nerbonne, nerbonne@let.rug.nl, H11.436

http://www.let.rug.nl/~nerbonne/teach/intro-k/

J. Glenn Brookshear, *Computer Science: An Overview* Reading, Mass., US:Addison-Wesley, 2003.

Web site has weekly topics, readings, assignments, incl. final paper, contact information, lots of pointers

Inleiding Informatiekunde

Prerequisites:

- interest in computing
- interest in humanities
  - language & linguistics;
  - (computer-mediated) communication; and/or
  - history, incl. art history; literature
- academic skills (reading, writing, reasoning)

Non-prerequisites:

- mathematical sophistication
- facility with software — taught later!

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Goals of Course

Course Emphases

- Information Systems (Informatiekunde, IK)
- Computing in Humanities
  - topics as above
- Program of Study in Groningen
  - inform decision whether to study IK
- Academic skills (writing)

Formal Requirements

- Weekly lecture/discussion (**attendance required**)
- Five exercises based on laboratory practica.
- One paper (10pp. $\approx$ 5,000 wd.)

Grades

- Lectures (10%)
  Attendance at least five times.
- Exercises (50%)
  10% each
- Paper (40%)

Why Computers in Humanities?

Lots of humanities issues are EMPIRICAL and DATA-INTENSIVE

empirical — involving matters of fact, not purely conceptual
data-intensive — issues for which lots of data may be relevant

Examples of empirical, data-intensive issues:

- Pronunciation of all Dutch words
- 18th cent Amsterdam import records
- 800 years history of Groningen city structure
- Vocabulary in Shakespeare's writings

Computer needed for *empirical*, *data-intensive* issues.

Information Systems

Information

capture digitalization of sound, image, video

- basic interpretation (optical character recognition

storage including indexing, preparation for retrieval

organization incl. databases, DB extensions

processing algorithms and programming

presentation make information accessible

Illustrated in this course with topics from humanties computing.

Scientific/Scholarly Aims

Scientific/Scholarly Knowledge

theory Coherent, general account

experiment Concrete, specific test of theory

application Practical use of knowledge

Structure of Texts

theory Sequences, regular languages, finite automata

experiment Analysis of texts into word-forms, words (lemmata), ...

application Search in textual databases (WWW)

- Find texts similar to query

Curriculum Informatiekunde

Semester	Colleges
1	Inleiding IK, Programmeren, HTML, Logica, Tekstmanipulatie
2	Inleiding (2), Datastructuren, WebTech, Statistiek, Corpustaalkunde
3	Databases, XML, Prolog, Vrij (10)
4	Taalverwerking, DB Modellen, Beeldverwerking, Vrij (10)
5	IR, Informatiesystemen, Keuze (CIW òf KI), Vrij (10)
6	Project in Elek. Media, Taalverwerking; Scriptie; Vrij (10)