(Qualitative) <u>Research Methods for the Information Sciences</u> (code 400290)

12 April 2005

FINAL EXAM

Vrije Universiteit Amsterdam (VUA/FEW/I)

<u>*IMPORTANT NOTICE*</u>: This is a **closed book** exam. You are supposed to answer the questions on your own, i.e. without the use of a computer, books or any other material and without discussing the exam with anyone else. Cheating is not tolerated and will be handled according to strict University policies.

This exam has been designed to test your overall knowledge and understanding of the material covered in the course. It consists of **a total of 6 questions for a total of 100 points**. The exam score is your total number of points divided by 10, and yields 2/3 of the final mark for this course; the remaining 1/3 comes from your score for the MSc review essay assignment.

You are free to give your answers in either English or Dutch. Please make sure to use *the present form* for your answers, and use the space provided under each question. Answers will be evaluated based on content rather than length. In other words, there are no extra points for providing long answers (i.e., for "jabber"!).

This exam is not meant to be stressful and should not take you much more than one hour to complete if you have carefully studied the course materials. But: **Please make sure that your handwriting is legible and that you have printed your name at the top of <u>each page</u>. Good luck!**

Student Name:....................

Student ID Number:....................

Points:		
1)	_____	out of 15
2)	_____	out of 10
3)	_____	out of 15
4)	_____	out of 20
5)	_____	out of 15
6)	_____	out of 25

Points total: _____ out of 100 **(Exam score = points/10)**

Student Name:…………..…

Question 1 (15 points):
There are many different forms of scientific reasoning. This question is on two basic forms of scientific argument.

Question 1a (5 points).
Explain what "induction" is. Give a concrete example. Limit your answer to 4 lines.

Question 1b (5 points).
Explain what "deduction" is. Give a concrete example. Limit your answer to 4 lines.

Question 1c (5 points).
Explain clearly what the difference between induction and deduction is. Limit your answer to 5 lines.

Question 2 (10 points):
A key term in empirical research is "data", but real data come in many different guises.

Question 2a (5 points).
Explain what "primary data" are. Limit your answer to 3 lines.

Question 2b (5 points).
Explain what "secondary data" are. Limit your answer to 3 lines.

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Question 3 (15 points):
This question concerns the research method known as "focus group".

Question 3a (5 points).
Explain what a "focus group" is. Limit your answer to 4 lines.

Question 3b (10 points).
Give a concrete, practical example of a research question in which the use of focus groups would be a good approach. Outline briefly how you would run the focus group in your chosen research setting. Limit your answer to 8 lines.

Question 4 (20 points):
The "case study" is a prime example of a flexible research design in the Information Sciences.

Question 4a (5 points).
A first kind of case study is an "exploratory" case study. Explain what an exploratory case study is. Limit your answer to 3 lines.

Question 4b (5 points).
Give a concrete example of a research question or setting in which it would be useful to carry out an exploratory case study. Limit your answer to 5 lines.

Question 4c (5 points).
Another kind of case study is called a "validating" case study. Explain what a validating case study is. Limit your answer to 3 lines.

Question 4d (5 points).
Give a concrete example of a research question or setting in which it would be useful to carry out a validating case study. Limit your answer to 5 lines.

Question 5 (15 points):
The "validity" of results and claims is a central concept in scientific research; but there are many different types of validity.

Question 5a (5 points).
Explain what "internal validity" means. Limit your answer to 4 lines.

Question 5b (5 points).
Explain what "external validity" means. Limit your answer to 4 lines.

Question 5c (5 points).
Explain the difference between internal and external validity. Preferably show it by giving a concrete example that clearly demonstrates what the difference is. Limit your answer to 5 lines.

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Question 6 (25 points):
Suppose the Dean of the Faculty of Sciences asks you to carry out a research study concerning the quality of the student restaurant and food in the building as perceived by the students, and how it might be improved. The Board members of the faculty however want to have a choice, and therefore ask you to submit two separate *non-overlapping* research designs, i.e. research designs that differ from each other in that they employ *different research methods*. Come up with a concise description of two different designs (A and B) for investigating this research problem.

Question 6a (12.5 points).
Explain your Research Design A. Limit your answer to 10 lines.

Question 6b (12.5 points).
Explain your Research Design B. Limit your answer to 10 lines.

Student Name:……….….

<u>Feedback (optional):</u>

- If you feel that a question was unclear, please indicate below the number of the question and provide a brief explanation.

- Was preparation for this exam a good way to get you to go over the class material again? Would you have reviewed the material otherwise?

- Do you feel that this exam was fair as a test of your knowledge about the course material? If not, what would you have done differently?

- How long did it take you to finish this exam?