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WRITTEN EXAMINATION

Course:	**Research Methodology and Communication**
Course code:	**VP761**
Credits for written examination:	**4 credits**
Date:	2024-03-19 at 08:15 - 12:30
Examination responsible:	Richard Senington
Teachers concerned:	Jörgen Hansson
Aid at the exam/appendices:	Oates et al. *"Researching Information Systems and Computing"*, 1st or 2nd ed. No electronic devices are allowed
Other:	Choose and answer at most(!) four questions out of the five questions. If you are answering more, the last question overflowing the limit will not be graded. Questions are equally weighted (10 points/question). Answer each question as a short text essay composed of one or more paragraphs, supplementing your answer with diagrams if desired. Points are awarded for each reasoning/argument/part of the answer that is distinct (not a repetition of a previous part), relevant to the question and justifiable from an informed reading of the course text. Answer in Swedish or English. Write legibly!

Instructions

- ☐ Take a new sheet of paper for each teacher.
- ☒ Take a new sheet of paper when starting a new question.
- ☒ Write only on one side of the paper.
- ☒ Write your name and personal ID No. on all pages you hand in.
- ☒ Use page numbering. Order your answers in sequential/linear order!
- ☒ Don´t use a red pen.
- ☒ Mark answered questions with a cross on the cover sheet.

Failure to follow the above instructions will result in point reductions!

Grade points: 40

ECTS grading:

A: 36-40	B: 32-35	C: 28-31
D: 24-27	E: 20-23	F: 0-19

Examination results should be made public within 18 working days.

Good luck!

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Question #1: Design Science

In design science, the focus is on building artefacts that would be valuable (creating utility) to some user, group, organization, and/or society. Name and provide real-world examples of the canonical and distinct forms of artefacts. In doing so, also elaborate on how one is to ensure that an artefact is fit for its purpose, i.e., solves the intended problem(s). Furthermore, how do scientific results of a design science research project relate/depend/connect to the artefact, or put differently, what is the relationship between scientific results and the artefact in design science?

Question #2: Research Philosophy

Define the term "research philosophy" as described by Oates. Discuss the implications of adopting a positivist vs. interpretivist approach in research (this requires that you explain what a positivism and interpretivism are to be able to reason about the consequences/implications of adopting them).

Question #3: Quantitative and Qualitative Research

Explain the difference between qualitative and quantitative research methods in the context of information systems, providing examples of when each method might be most appropriately used.

Question #4: Develop a Research Strategy

Consider a research project aiming to evaluate the usability of either (a) newly developed mobile application for managing personal finances, or a new home robot that can assist with keeping doing laundry and keeping the kitchen clean. Design a research strategy using experimental research, detailing the experimental design, variables, and potential findings.

Question #5: Bias

Analyze the potential biases that can arise in research and suggest strategies to mitigate these biases. A guideline is to identify and define/explain the bias together with concrete examples when they can occur, and how to mitigate them.