

## WRITTEN EXAMINATION

Course: **Research Methodology and Communication**

Course code: **VP761**

Credits for written examination: **4 credits**

Date: 2025-12-04 at 08:15 - 12:30

Examination responsible: Richard Senington

Teachers concerned: Jörgen Hansson

Aid at the exam/appendices: No aids, tools, or electronic devices are allowed

Other: Choose and answer at most(!) four out of the six questions. If you are answering more, the last question(s) 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!

### Q1: Research Goals, Objectives, and Research Questions

- a) Explain the difference between a *research aim/goal*, *research objectives*, and a *research question*. Furthermore, explain and provide examples on what constitutes a good hypothesis, and elaborate on how it relates to a null-hypothesis.  
(5 points)
  - b) Define triangulation and describe two types of triangulation commonly used in IS research. Explain how triangulation strengthens credibility.  
(5 points)
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### Q2: Reliability and Data Saturation

- a) Discuss what reliability means in qualitative research and describe two practices that increase it.  
(5 points)
  - b) Define *data saturation* and explain why it is important in qualitative research. How can a researcher recognise that saturation has been reached? Give examples of data collection methods where data saturation may occur and give examples of such saturation.  
(5 points)
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### Q3: Case Study

Case studies can be exploratory, descriptive, or explanatory, and can use single-case or multiple-case designs.

- a) Explain why defining the boundaries of a case study is crucial and describe what can go wrong if boundaries are poorly specified.  
(3 points)
  - b) Provide an example of when a single-case design would be methodologically stronger than a multiple-case design, and justify your choice.  
(3 points)
  - c) Explain how case selection strategy impacts validity of the case study.  
(4 points)
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#### **Q4: Design Science and Theoretical Contribution**

Design science research produces artefacts such as models, methods, and instantiations.

- (a) How can a researcher empirically evaluate whether a system or artefact achieves its intended functional goals (without relying solely on users' subjective satisfaction and use of surveys and interviews)?  
(3 points)
  - (b) Elaborate on the possible bias/biases that come into play if utility of the artefact is investigated using interviews and surveys.  
(3 points)
  - (c) Discuss the relationship between the artefact and the study's theoretical contribution.  
(4 points)
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#### **Q5: Literature Review**

Describe systematic literature review, its purpose and components. Give an example of how to conduct such a review. Furthermore, what are important aspects to consider when carrying out a literature review.

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#### **Q6: Bias and Validity in Mixed-Methods Research**

Mixed-methods research combines qualitative and quantitative components, and, thus, can be exposed to multiple forms of bias already well-known in research.

- (a) Identify and define three well-established biases covered in the course literature (e.g., from Oates or lecture slides) that could appear in a mixed-methods study.  
(3 points)
- (b) For each bias, explain how it might arise in both the qualitative and the quantitative strand of a mixed-methods study.  
(3 points)
- (c) Discuss how these biases could affect internal and/or external validity and outline specific strategies for reducing their impact.  
(4 points)