You have 90 minutes to work on the exam. You can reach up to 90 points. The points given per question provide you with a hint how much time should be enough to provide an answer.

You can give the answers to the exam exercises either in English or in German. But all of your answers have to be in one and the same language throughout the whole exam (English or German).

Do not use your own paper sheets, but only the ones provided in the exam.

Put your name and your student number on each paper sheet.

If you have to make any assumptions, highlight and/or describe them accordingly.

Good luck!

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<tr>
<th>Question</th>
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Question 1: Media synchronicity  
(17 points)

Question 1.1 (8 points)

Think about your small group meeting in the second exercise*. The media that you used in this collaboration were important success factors.

Explain, shortly and concisely, the core concept of the Media Synchronicity Theory. Furthermore, choose one concrete episode of your small group meeting and explain how the Media Synchronicity Theory can be used to effectively support group work processes.

* In the small group meeting, you designed the patient’s room of the future while using Adobe Connect.
Question 1.2 (9 points)

Imagine that one of your colleagues in your small group meeting says the following:

“It's a pity, that there is no possibility to do a video chat [there is only a text-based chat and a whiteboard], it would be much easier to create and discuss ideas regarding the patient room of the future.”

a) Respond to your colleague. Would you agree or disagree? Use one of the theoretical constructs from the lecture to justify your answer.

(5 points)

b) In your small group meeting, you experienced convergent as well as divergent phases. How would your answer from part a) of this question change if your colleague only referred to the convergent parts of the collaboration. Explain and justify your changes.

(4 points)
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Question 2: Functions of group work, effects on group work (20 points)

In the lecture, you learned about the fundamentals of group dynamics and what supports them in the collaboration.

Question 2.1 (12 points)

a. While collaborating, groups provide contributions on three levels (also called group functions). List those three levels of contribution. Furthermore, explain how you and your colleagues made contributions on these three levels in your small group meeting*.

(6 points)

b. Explain to what extent does the effects/problems occurring in the group work influence each of the three group contributions (that you described in part a. of this question). Discuss, for each group contribution, at least one effect/problem.

(6 points)

* In the small group meeting, you designed the patient's room of the future while using Adobe Connect.
Question 2.2 (8 points)

Collaboration in large groups depends much stronger on the awareness functions than it is the case in small groups. Explain what awareness means in the context of group work. Furthermore, describe three examples of group work problems which occurred in your large group meeting* and which can be diminished by specific awareness functions. Explain the respective awareness function and how it reduces the problem at hand.

* In the large group meeting, you designed the automated post office of the future while using Adobe Connect.
Question 3: Engineering group collaboration  
(22 points)

In the third exercise, you planned a workshop to elicit the core functionalities of a smartphone app supporting immigrants in Switzerland.

**Question 3.1 (8 points)**

Describe a concrete phase in the workshop (that you planned in the third exercise), which comprises the pattern of collaboration *Generate*. What are the characteristics of your *Generate*-phase? Apply the Seven-Layer Model of Collaboration and explain what characteristics you assigned in each layer for the *Generate*-phase.
Question 3.2 (14 points)

Imagine that your supervisor (in the company, where you planned the "killer features"-workshop) is pleased with the idea to conduct the workshop. But as she is very interested in this topic, she would like to moderate the workshop herself.

a. Explain to your supervisor what her role will be when conducting the workshop. What support or structures should she provide to the workshop’s participants to make the workshop successful?

(6 points)

b. The company’s higher management thinks about purchasing a group support system to be used in future workshops. They heard of your skills and knowledge regarding the CSCW aspects of workshops. They ask you for some advice on what they should focus on when choosing a suitable system. Based on what you learned in the lecture, give advice on at least 4 issues and justify them.

(8 points)
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Question 4: Organizational Collaboration Platforms and User Acceptance (21 points)

The CIO (Chief Information Officer) of your company wants to introduce novel software to support the company’s employees in their collaboration but he also wants to enhance the collaboration with partner companies.

Question 4.1 (13 points)
The CIO knows of your experience with different collaboration platforms available on the market and asks you for sharing some useful insights with him:

a. Give and describe five of the main characteristics of a collaboration platform. Explain, why a collaboration platform fits better into the company’s work environment than some popular social software like Facebook or Google+?

(7 points)

b. How do collaboration platforms help to improve collaborative work practices (e.g., sharing to-do’s)? Provide at least three exemplary improvements.

(6 points)
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Question 4.2 (8 points)
The acquired software is scheduled to be rolled-out in the company. The CIO builds on your knowledge and wants you to prepare a concept for the organizational implementation of the collaboration platform. You have to make sure that the company’s employees (i.e., the end users) accept the new software.

a. Explain in one or two sentences the meaning of "user acceptance". Furthermore, list and describe at least three distinct factors that influence the user behavior and explain them.
   (4 points)

b. In the end, the CIO bought the software with the highest pragmatic quality of use for the cheapest price. You are not satisfied with his decision. Why do you think it is not sufficient to consider only these two parameters for this specific decision? Explain your point to the CIO while referring to the theoretical constructs related to user acceptance from the lecture.
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Question 5: Communities in Education: motivations, benefits, problems  
(10 points)

Question 5.1 (10 points)
E-Learning refers to usage of electronic media in teaching and studying. E-Learning 2.0 describes the fact that it is more and more enabled by Web 2.0 technologies, such as wikis, blogs, social platforms, where students interact with each other as well as with their teachers. E-Learning 2.0 approaches depend strongly on the active participation of students, teachers, as well as support from schools or universities.
Imagine, you are teaching a class on advanced algorithms. You have created an online community "e-@lgo" for your exercises. It shall be used in parallel to the traditional face-to-face sessions.

a) How may your students benefit from being active within the community? Think of all the motivations that contribute to the community or the benefits one can get from participating in the community. List three of such motivations or benefits and explain why they are most likely to occur in the "e-@lgo" community.  

(4 points)

b) You have learned about problematic behaviors occurring in online communities. List and characterize three of them shortly. Additionally, suggest how to reduce their negative impact on the community.  

(6 points)
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