The emphasis in the exam will be on the prescribed chapters of the book by Matlin, Cognitive Psychology, and on the topics discussed in the lectures by Zerrin and Joske.

Questions will also cover all articles mentioned in the literature list, and the guest lecture by Hans Theuws of Noldus. For these articles, we provide the following tips and suggestions.


- We will not ask you which parts of the brain are involved in emotion processing.
- The paragraph *Theories of Affective Effects* is important. However, it is a complex paragraph; can you draw some general conclusions from the research that is discussed? Try to match what you read here with the theory offered by Matlin and the chapter by Forgas.
- Make sure you understand the main characteristics of the four approaches to affective sciences in hf/hci; and that you are able to explain the practical recommendations included at the end of each description. Table 1.1 can help you understand the approaches.
- The paragraphs on affect induction and affect measure/detection techniques are important! You should be able to produce Table 1.2 yourself. Relate what you learned in the guest lecture by H. Theuws (Noldus) to the paragraph on affect measure/detection techniques.


- This paper reads well, and is not too complex. Check if you can reproduce the main points and conclusions of each of the four sections:
  1. The contemporary social structure of technology, including how both emotions lead to technology use and technology use influences emotions;
  2. how affective processes manifest and change when interacting with others over communication technologies, especially the Internet. Pay extra attention to the paragraph “Forms of affective mediation”;
  3. Emotions in human-computer interaction including the cultural and affective consequences when human sociality is directed toward machines;
  4. Technologically innovative methodologies.


- The authors focus on mood measurement, in contrast to emotion measurement. The difference between emotion and mood is very important. Also pay attention to the differences in the measurement technique they describe. What are the advantages and disadvantages of each measurement method, such as self-reports measures? What are, according to the authors, the benefits of pictorial measures compared to verbal self-report?
- The authors describe the development process of Pick-a-Mood. Make sure you understand the main steps they took for the design and validation, and the issues they encountered.
Gruber, J. Human Emotion 1.3: What is an emotion?

- The topics in this online course are also covered in the lectures, so study them carefully.


- Study the definition of Affective Computing? Who is the founder, and how the field evolved through history?
- What are the different affect sensing methods? You should know the main idea behind how these technologies help for emotion understanding, what features can be extracted from different signals and at a high-level what are the methods for emotion understanding using these signals.
- What are the four classes of social robots? (Socially evocative, social interface, socially receptive, sociable etc.). What are the differences between virtual characters and social robots in terms of representation? What is an Embodied Conversational Agent vs a relational agent?
- What are the three types of applications of affective computing? (Applications section, first paragraph).
- Be able to give examples of affective computing applications from different areas such as health, education, or others.
- What are the ethical and privacy concerns of Affective Computing?


- What is persuasion? Explain. (A noncoercive attempt to change attitude or behaviors).
- What are the four major waves in computing? Explain them and tell why persuasive technology is the fourth wave.
- Give examples of different domains where persuasion matters. (Table 7.1)
- What is macrosuasion and microsuasion? Explain and give examples.
- What are the three functions of computers according to the Functional Triad Framework?
- How computers can help as tools, simulations and persuasive social actors? Get the idea behind each subsections under these three categories (e.g computers that increase self-efficacy) and be able to give examples of these categories. Pay attention to Table 7.2 and 7.3.
- What is credibility? What are the seven categories that credibility matters?


- Think of this chapter in link with the lecture on Emotion Recognition. You need to have an understanding of what are the physiological signals, facial gestures and body tracking standards, how they are measured and what are their measurement units. You will NOT be asked to give details about sensors such as Emotive headset but you are expected to understand the differences between the capabilities and limitations of different methods for emotion recognition.
- Have a general understanding of data handling steps: sampling, filtering and integration.
- Have a general understanding of data analysis: feature extraction, feature selection, data mining, interpretation and evaluation.

- This literature is mentioned in the slides of the lecture on Virtual Reality and Presence. Be able to explain how presence, action and space are related. Pay attention to Figure 1.1. and 1.2 and know what is egocentric, allocentric, peripersonal and extrapersonal space. In particular sections 1.2 and 1.3.


- Study the three main theories accounting for mood congruence: (1) associative network theories emphasizing memory processes (2) affect-as-information theory relying on inferential processes and (3) an integrative Affect Infusion Model (AIM).
- In the paragraph “Evidence for mood congruence in thinking and behavior”, pay attention to”Mood Congruence in Memory and Attention; Mood-State Dependent Memory.
- Also, study the paragraphs: Mood Effects on Information Processing Strategies; The Assimilation/Accommodation Model; Mood Effect On Memory Performance; Mood Effects On Judgmental Accuracy; and, of course, the Summary and Conclusions.