

Introduction to Digital Media

Peter von Maydell, Frieder Nake
Winter Term 2017/18



Outline, conditions, schedule

18 August 2017

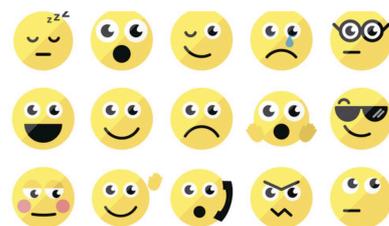
Digital Media! If that term is taken to mean smartphones, we find them all over the world. They are in the hands and pockets of females and males, kids and grandparents, rich and poor. Some consider digital media to be media of liberation or convenience and independence. Others point at their control and surveillance potential, at the subtle suppression that comes with digital media. Until only a few years ago, nobody had a smartphone. Meanwhile, they have created their own demand.

The very term, »Digital Media«, says that our field of study is about *digitality* and *mediatization*. We may consider the field as design work of a highly general kind. Somehow immaterial and interdisciplinary. It is situated between *algorithmics* and *aesthetics*, between event and research, between strict logical derivation and wide open interpretation.

That much we can say for sure: Without computers, there are no digital media. Digital media is one of the results of the *algorithmic revolution* which politicians call the "digital revolution". Computers are its pre-condition.

Digital media appear as the technical carriers of current hypes like Big Data, Digital Humanities, Gamification, ubiquitous communication, surveillance, espionage, smart industries, Industry 4.0, the new machine learning, the new Artificial Intelligence. And smilies, in all their variations.

We may view verbal (symbolic) and visual (iconic) expression and communication at odds with each other. The subtle and greatly differentiating power of symbolic expression seems to lose against the touching, immediate, and flat iconic mode. A cultural revolution is happening as people voluntarily use various devices of IT.



Our Bremen international Masters program of study is offered jointly by the University of Bremen and the University of the Arts, Bremen. They grant the degrees of a Master of Science (M.Sc.) and a Master of Art (M.A.), resp.

Goals are: Students gain a good understanding of Digital Media – conceptually, historically, techni-

Winter Term 2017/18 | 4 SWS | 6 ECTS | M.A. & M.Sc. Digital Media | Module M-MA-1 (M105) | VAK Uni 03-06-M-510.00
Starts 16 October 2017 | Mondays 14:00-18:00 at HfK, room: Auditorium

Peter von Maydell
p.maydell@hfk-bremen.de | (0421) 9595 1237 | Am Speicher XI 8 | <http://www.maydellinterface.de> |

Frieder Nake
nake@informatik.uni-bremen.de | (0421) 218 64485 | MZH room 1330 | Office hours: Thursday 14-16 & Monday HfK

cally, aesthetically, in theory and practice. When their friends ask them, what it is that they are doing, they should be able to explain in simple and clear terms. We establish the foundation for this.

Students will *experience a healthy dialectics* in studying digital media: the tension between *algorithmics and aesthetics*. We are concerned with both these aspects at the *same* time. Things in the digital dimension are designed for perception (surface form) *and* they are constructed for manipulation (subface form). This is new! It is exciting and challenging! Sensual perception is subject matter of aesthetics and subjective; mental construction is subject matter of algorithmics and objective.

General structure for this term

As indicated, students should develop a deeper understanding of "digital media". From the term it is clear that we are dealing with media. But with media of a special kind: "digital". This term is not very precise. Important is what distinguishes digital from other media. The difference is the computer. Without computers, without the *semiotic machine*, there are no digital media! Therefore, we need a good understanding of the media specifics of computers.

Computers are machines to evaluate computable functions. A first dimension we must, therefore, study is *computability*. It is fundamental for everything we do. But since the mid-1980s, computers have been used in a particular mode: in the interactive mode. A second dimension of our studies thus is *interactivity*. On their path from the view as an automaton via tool to media, computers started to be connected with each other by an enormous international technological network, the Internet. The third dimension of computers' media characteristics thus is *connectivity*. These three dimensions determine what we study!

We plan for 3 + 2 units:

- the Introduction (1 week)
- three topical blocks of four weeks each:
 - computability
 - interactivity
 - connectivity
- the Conclusion (1 week).

Each of the three topical blocks defines four meetings of the seminar. They are planned as

1. A guest gives a one-hour lecture on the *topic* of the block. The lecture is open to the general public. We hope for broad discussion to emerge from it. To prepare for this, groups of students are requested to work out questions and remarks. Members of the four thematic groups for the topic (cf. "Conditions for credit") are challenged in particular. All of us should prepare for meeting the guest, and afterwards reflect on what he or she said. After the lecture and discussion, short excerpts will be handed out, selected from the guests' publications. We will use them for a broader discussion with our visitor.
2. The second meeting of each block is scheduled for presentations by *thematic* groups of students (four groups of five members each). We build those groups at the first meeting of the seminar (cf. "Conditions for credit"). Each group gets a specific theme in the context of one of the four topics. They also get one paper to study as a basis for their presentation. Each group presentation gets 45 minutes, including discussion.
3. At the third meeting, students are asked to work alone or in small groups on an issue of the topic. You take up the guest's lecture and the students' presentations from the week before; you formulate questions, discuss, record results, be ready to present and discuss them.
4. The last meeting of a topic is scheduled for deeper treatment of the theme, and its critical reflection by us, the teachers. We first lecture including some extras like a video; this develops into some theses we suggest for discussion. The discussion should be result-oriented: we formulate results, even if only vaguely. A short summary presentation by us concludes the topical block with its four themes. We intend to prepare written summaries afterwards.

We also plan for an extra visit to a museum not far: to Edith-Russ-Haus for Media in Oldenburg or Sprengel Museum Hannover or Kunsthalle Hamburg. Details to come.

Conditions for credit

The European Credit Transfer System (ECTS) considers one credit point (CP) as equivalent to 30 hours of work. This is considered to be the average workload of an average full-time student. Our seminar carries 6 CPs. They amount to a workload of 180 hours of work for each student during the term.¹

The six credit points are granted if you satisfy these general conditions: you are *always participating* as an *active* member of the seminar. You are supposed to read papers, think about them in contexts, reach out to other questions, issues, and aspects, sketch ideas for the group's presentation, participate in discussions.

Explicit requirements for credit are these:

1. *The cooperative effort.* We build twelve study groups of five students each. For each of the three topical blocks, we formulate four special themes for group work. Each study group chooses their theme to work on (we do this at the first meeting). The theme will be represented by one publication. Each group deeply studies their assigned publication and discusses it from the perspective of their theme. The groups present their results to the second meeting of their topical block. They get 45 minutes for the presentation, including discussion. The group also formulates a set of questions for the invited speaker of their block.
2. *The individual effort.* After classes have come to their end, each individual participant is asked to write a term paper reflecting on what he or she has learned during the seminar. We announce the topic and question of the essay at our last meeting. You submit three weeks later.

Invited speakers

We have invited three guest speakers to introduce the topical blocks. They will stay on for the rest of the meeting for discussion. – We also invite two former graduates from our program for a session on "Studying and Working in the field of Digital Media".

The following persons will be our visitors:

30 Oct 17	computability	Georg Trogemann, KHM Köln
27 Nov 17	interactivity	Boris Müller, FH Potsdam
18 Dec 17	connectivity	Andreas Broeckmann, University Lüneburg
8 Jan 18	study & work	Hannes Waldschütz, Leipzig & NN

¹ The European credit transfer system (ECTS) is based on the following assumptions. Students are treated like average working people. One semester is six months, or 26 weeks. During this time, students should gain 30 credit points, i.e. work for 900 hours. If one week is 40 hours of work, students are supposed to work during one semester for 22.5 weeks, and have 3.5 weeks of vacation. This is the ECTS logic.

Schedule of activities (subject to change)

no.	date	topic, work
1	16 Oct 17	Introduction. Organizing the seminar. General questions. Overview of this term, the semester, and the program. We present the 3 topics with 4 themes each (a text for each of the 3x4 themes). Build groups of about 5 students per theme, assign a theme (text) to each of them. End with a get-together in the Aula, drinks, a bit of food.
2	23 Oct 17	A question but no answer: What are Digital Media? A bouquet of historic and systematic aspects of our domain of study. Studying in Europe, in Germany, in Bremen. More on organization.
3	30 Oct 17	Topic 1 (1): <i>Computability</i> . Guest speaker 1 (Georg Trogemann, Köln)
4	6 Nov 17	Topic 1 (2): Four groups of students present their themes
	10 Nov 17	Visiting an exhibition in Oldenburg, Hannover, or Hamburg
5	13 Nov 17	Topic 1 (3): Students work on small projects whose results they submit
6	20 Nov 17	Topic 1 (4): Reflection on, and summary of topic (PvM, FN)
7	27 Nov 17	Topic 2 (1): <i>Interactivity</i> . Guest speaker 2 (Boris Müller, Potsdam) [14:00-17:30]
8	4 Dec 17	Topic 2 (2): Four groups of students present their themes
9	11 Dec 17	Topic 2 (3): Students work on small projects whose results they submit
10	18 Dec 17	Topic 3 (1): <i>Connectivity</i> . Guest speaker 3 (Andreas Broeckmann, Lüneburg)
11	8 Jan 18	Topic 2 (4): Reflection on, and summary of topic (PvM, FN) (plus visit by former students)
12	15 Jan 18	Topic 3 (2): Four groups of students present their themes
	19 Jan 18	Visiting an institute at the University
13	22 Jan 18	Topic 3 (3): Students work on small projects whose results they submit
14	29 Jan 18	Topic 3 (4): Reflection on, and summary of topic (PvM, FN)
15	5 Feb 18 extra!	Conclusion. Retrospective, summary, feedback, critique (prepared by anonymous questionnaire). Profs present: "History, theory, and practice of digital media"; students will be given their topic for a "fundamental essay" .
	28 Feb 18	Deadline for submission of individual "fundamental essay"