

# Introduction to Digital Media

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Winter Term 2019/20



## Outline of the Course & Conditions for Credit

Winter Term 2019/20

You have registered for the joint international study programme "Digital Media", offered jointly by Hochschule für Künste (HfK), Bremen, and the University of Bremen. The programme leads to the degrees of a Master of Science (M.Sc., at the university) or a Master of Art (M.A., at HfK). During your first semester you are supposed to take "Introduction to Digital Media" as the only mandatory course besides electives. This is a challenge for the two of us who are offering the course this term: We will try hard to make it interesting enough for you so that you like to come and actively take part in our meetings. Our general approach to academic studies is, following John Dewey, "learning by doing and reflecting".

*Digital Media!* If you take that term to mean "smartphones", we find Digital Media all over the world in different density of distribution. Estimates say that there were 2.71 billion users of smartphones in 2019 (that's one third of the world population). Statistics also claim that 66% were "addicted to their smartphone" (whatever such a term and number may mean). These gadgets are in the hands and pockets of females and males, kids and grandparents, rich and poor, workers and managers, students and professors. The great equalizer?

Some consider digital media to be media of liberation, or of convenience and independence. Others point at the potential for control and surveillance these gadgets possess, or at the subtle suppression that sneakily comes with digital media. Until only a dozen of years ago, nobody had a smartphone. Meanwhile, the smartphone has created its own demand. It appears impossible to many of you not to possess one. If you now want to "communicate" with a group of friends, it will be via WhatsApp, and thus via smartphone. But you might, with good reason, ask: Is the smartphone a kind of phone (as the name suggests), or is it a sort of supercomputer?

The very term, Digital Media, says that our field of study is about the digital and the medial; it is about digitality and mediatization. We may consider our field of study as design work of a highly general kind. Somehow immaterial and interdisciplinary. It is situated between algorithmics and aesthetics, or between event and research, or extending from strict logical derivation to wide open interpretation. Do you see this similarly? Do you associate anything with the terms, *algorithmics* and *aesthetics*?

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Winter 2019/20 | 4 SWS | 6 ECTS | M.A., M.Sc. in Digital Media | Monday 14-18 HfK Auditorium | Begin 21 October 2019

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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 and journalists prefer to call the *digital* revolution. Computers constitute its pre-condition.

Digital media appear as the technical carriers of some current hypes like Big Data, Digital Humanities, Gamification, ubiquitous communication, smart industries, Industry 4.0, the new machine learning, the new Artificial Intelligence, Neural Networks, and more. And smileys, in all their variations.

We may consider the two dominant modes of communication – the verbal (symbolic) and the visual (iconic) modes – as being 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 stare at the screens of various devices of information technology.

Our *goals* for the seminar are: You should gain a good understanding of Digital Media – conceptually, historically, technically, aesthetically, in theory & practice. When your friends will ask you, what it is that you are doing, you should be able to explain just that in simple and clear terms. We try to establish the foundation for this.

You will experience a healthy dialectics in studying digital media: the mentioned tension between algorithmics and aesthetics. We are concerned with both these aspects at the same time. Things in the digital dimension are designed for sensual perception (surface aspect of things) and they are constructed for logical manipulation (subface aspect). This duplicate existence is new! It is exciting and challenging.

## General structure of the seminar for the term 2019/20

As already indicated, you should develop a deep understanding of "digital media" since this is the subject matter of our seminar. The very term of "digital media" already says, that we are dealing with media. But with media of a special kind: "digital". This term is not very precise. Important is the distinction between digital and other media. The distinction is to be found in the computer. Without computers (we call them semiotic machines, for their subject matter are signs and processes of signs), there are no digital media! Therefore, we need a good understanding of the media-specifics of computers.

Computers are machines to evaluate computable functions. The first dimension we must study, therefore, is that of *computability*. It is fundamental for everything we do here. But since the mid-1980s, computers have been used in a particular mode: in the interactive mode. The second dimension of our studies thus is the dimension of *interactivity*. Along the computer's path from the old view as an automaton, via being considered a tool, to being almost equal to media, computers started to become connected with each other by an enormous global technological network, the Internet. The third dimension of computers' media characteristics thus is: *connectivity*. These three dimensions deeply determine digital media!

We plan the contents of the course for 3 + 2 units:

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

Each one of the three topical blocks defines four meetings of the seminar. We plan them in the following way:

1. A guest speaker 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 groups for the topic are

challenged in particular (cf. "Conditions for credit"). All of us should prepare for meeting the guest, and afterwards discuss with him or her topics and issues of their presentation.

2. The second meeting of each block is scheduled for presentations by groups of students (there may be four groups of up to five members each, depending on the number of course participants). We build the groups at the first meeting (cf. "Conditions for credit"). Each group presents a scientific publication we assign to them. Group presentations take 45 minutes, including discussion.
3. The third meeting is open in format. We will suggest topics for you to work on in small groups. We take up the guest's lecture and the students' presentations from the weeks before; you formulate questions, discuss them, record results, present your findings, conclusions, and open questions, etc.
4. The last meeting of a topic is scheduled for an in-depth treatment of that topic and its critical reflection by us, the teachers. Additionally, we invite two teachers for each of the topics, one from HfK, one from the university. They will give us their view, experience, and practice of the field in lectures of about 30 minutes plus discussion. The two of us as convenors of the seminar will also present our personal views. We formulate them for discussion. We try to formulate results in short summaries.

### Conditions for credit

The European Credit Transfer System (ECTS) considers one credit point (CP) as equivalent to 30 hours of work. This is defined 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.<sup>1</sup>

The six credit points will be granted if you satisfy the following *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, etc.

*Explicit requirements* for credit are these two:

1. The *cooperative effort*. We build twelve study groups of up to five students each. We have the three topics described above. Each topic will be associated with four groups. ( In total, 3 topics x 4 groups x 5 students = 60 students.) For each of the three topical blocks, we offer four publications, i.e. one paper for each of the study groups. Each group thoroughly studies their assigned publication and discusses it internally, in detail. The groups present their results at the second meeting of their topical block. Each group has 45 minutes for the presentation, including time for discussion. – The group should also formulate a set of questions for the invited speaker of their block.
2. The *individual effort*. After classes have come to their end in early February, 2020, each individual participant is asked to write a term paper (essay) reflecting on what he or she has learned during the seminar. We will announce a specific topic and question for the essay at our last meeting. You are asked to submit the essay four weeks later in March, 2020.

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<sup>1</sup> The European credit transfer system (ECTS) is based on the following assumptions. Students are treated like average working people. One semester stretches over six months, or 26 weeks. During this time, students should gain 30 credit points, i.e. they should work for 900 hours. If we take one week as 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.

## Invited speakers

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

11 Nov. 19	<b>computability</b>	Prof. Dr. Georg Trogemann, Kunsthochschule für Medien, Cologne
25 Nov 19	<b>interactivity</b>	Prof. Dr. Lasse Scherffig, Cologne International School of Design
13 Jan 20	<b>connectivity</b>	Shusha Niederberger, Zürich University of the Arts & Haus der elektronischen Künste, Basel
3 Feb 20	<b>study &amp; work</b>	Two former graduates of our programme talk about their experience after graduating (names to be announced)

## Schedule of activities

no.	date	topic, work
1	21 Oct 19	Introduction. Organizing the seminar. General questions. Conditions for credit. We present the 3 topics. We give you the 3x4 texts. You build groups of 4 or 5 students each, up to four groups for each topic. Each group gets one of the papers for study. What to consider for the presentations?
2	28 Oct 19	Topic 1 (no. 4): <b>Computability</b> . Positions and reflections on the topic (PK, FN). Also: <a href="#">Kilian Schwoon</a> (HfK) & <a href="#">Gabriel Zachmann</a> (Univ.)
3	4 Nov 19	Topic 1 (no. 2): Four groups of students present their papers
4	11 Nov 19	Topic 1 (no. 1): Computability. Guest speaker: <a href="#">Georg Trogemann, Köln</a>
5	18 Nov 19	Topic 1 (no. 3): General, broad discussion between all of us; PK, FN present two relevant positions
6	25 Nov 19	Topic 2 (1): <b>Interactivity</b> . Guest speaker: <a href="#">Lasse Scherffig, Köln</a>
7	2 Dec 19	Topic 2 (2): Four groups of students present their papers
8	9 Dec 19	Topic 2 (3): General, broad discussion between all of us; PK, FN present two relevant positions
9	16 Dec 19	Topic 2 (4): Positions and reflections on the topic (PK, FN) Also: <a href="#">Tanja Diezmann</a> (HfK) & <a href="#">Johannes Schöning</a> (Univ.)
10	13 Jan 20	Topic 3 (1): <b>Connectivity</b> . Guest speaker: <a href="#">Shusha Niederberger, Basel &amp; Zürich</a>
11	20 Jan 20	Topic 3 (2): Four groups of students present their papers
12	27 Jan 20	Topic 3 (4): Positions and reflections on the topic (PK, FN) Also: <a href="#">Ralf Baecker</a> (HfK) & <a href="#">Ute Bormann</a> (Univ., to be confirmed)
13	3 Feb 20	Two former students join us for an exchange of experience: <a href="#">Roksolana Pleshkanovska</a> , <a href="#">David Beermann</a> (to be confirmed) – Conclusion. Retrospective, summary, feedback, critique (questionnaire). Students will be given the topic for an "individual essay" that they are supposed to submit for credit.
	3 March 20	Deadline for submission of individual essays

Because of various circumstances of the calendar, we have one or two weeks less than usually. Therefore, we must plan for only three meetings for topic 3, and have our last meeting in February. Also, unfortunately, we must deviate a bit from the schema described in the "General Structure", above.