

## **Syllabus & Course Policies**

### **Physical Computing in the Wild**

Bauhaus-Universität Weimar  
Interface Design Group, Media Art & Design  
Winter 2020-21

Time: 13:30-16:45  
Classroom: Online  
Electronics Lab: Marienstraße 5, Room 102  
Credits: 6 ECTS  
Course Language: English

Instructor: Brian Larson Clark  
Office hours: Online, by appointment  
Email: [brian.larson.clark@uni-weimar.de](mailto:brian.larson.clark@uni-weimar.de)

Course Website:  
[https://www.uni-weimar.de/kunst-und-gestaltung/wiki/IFD:Physical\\_Computing\\_in\\_the\\_Wild\\_WS2021](https://www.uni-weimar.de/kunst-und-gestaltung/wiki/IFD:Physical_Computing_in_the_Wild_WS2021)

Slack Workspace:  
[https://join.slack.com/t/physicalcompu-ejr6939/shared\\_invite/zt-ivj47g0j-x~6l2XCQ4uWbEkGfrlp2lQ](https://join.slack.com/t/physicalcompu-ejr6939/shared_invite/zt-ivj47g0j-x~6l2XCQ4uWbEkGfrlp2lQ)

### **Course Description**

This course introduces concepts and techniques for designing, constructing, and programming objects, spaces, and media that can sense and respond to their physical environments. Moving beyond the interface paradigm of the screen, keyboard and mouse, this course will employ physical computing to enable alternate models for interaction with (and through) computational devices that afford more subtle and complex relations between a range of human and non-human actors. Combining presentations, discussions on the history of relevant projects, and a series of hands-on technical exercises, this course provides a practical context for experimental modes of sensing the environment.

Topics include physical computing, interface design, practical components of hardware design, and embedded programming. This is a student-driven course and topics will be determined by the interests/needs of the class.

Due to the current crisis, it is assumed that this course will exist entirely online. If access to the Electronics Lab becomes possible towards the end of the semester, we will move course meetings to the Electronics Lab in Marienstraße 5.

## **Required Materials**

A laptop connected to the Internet

Arduino Starter Kit: <https://www.amazon.de/dp/B01ILR6AX4>

Multimeter: <https://www.amazon.de/dp/B07K3VBV1M/>

## **Required Texts**

All required texts will be distributed to the class via links and pdfs.

## **Disclaimer**

This syllabus is subject to revision by the instructor.

## **Office Hours**

Feel free to contact me via e-mail. We can arrange a time where we can discuss the course or your work.

## **E-Mail**

Be sure to check your email account regularly. PDFs, course materials, and course updates may be distributed via email. When sending me an email please always include the course name within the subject line.

## **Course Website**

[https://www.uni-weimar.de/kunst-und-gestaltung/wiki/IFD:Physical\\_Computing\\_in\\_the\\_Wild\\_WS2021](https://www.uni-weimar.de/kunst-und-gestaltung/wiki/IFD:Physical_Computing_in_the_Wild_WS2021)

I have also created a Slack workspace where I will post information about the course, readings, and other useful information. Let me know if you need access to this workspace.

[https://join.slack.com/t/physicalcompu-ejr6939/shared\\_invite/zt-ivj47g0j-x~6l2XCQ4uWbEkGfrlp2lQ](https://join.slack.com/t/physicalcompu-ejr6939/shared_invite/zt-ivj47g0j-x~6l2XCQ4uWbEkGfrlp2lQ)

## **Course Work**

Unless otherwise specified, assignments and projects must be complete at the beginning of class the day they are due. Late work will be penalized unless you have a reasonable excuse and make arrangements in advance. If you are having trouble turning in work due to circumstances beyond your control, please let me know.

## **Evaluation**

Grades will be calculated as follows:

30% attendance/participation/performance

30% assignments (weekly reading responses)

40% final project

**Attendance**

- A. Regular attendance is required for the development of proficiency skills.
- B. Attendance means attentiveness, cooperation, and active participation in class.
- C. Students are responsible for the material covered and the work assigned on the days they were absent

**Class Work**

- A. Students are expected to do their own work on all assignments and course work.
- B. Academic dishonesty will result in a failing grade. Examples of academic dishonesty are: copying the work from the internet or a book, having someone else do the work for you, or cheating during an exam or quiz.
- C. It is the student's responsibility to bring any questions on the assignments to the attention of the instructor.
- D. Assignments will be turned in to the instructor on the designated date.