# HNRS 190 – Honors Tutorial On the Origins of Computing August 28, 2014

# Description

Nothing defines this generation more than computing and communication. There are now 20 CPUs on the planet for every person. In your pocket you carry more computing power than all of NASA during the Apollo program. There are 80 CPUs in your BMW and 4Km of wire. Where did it all start? Why did it start? What is the difference between computing and physics or mathematics? We will explore the origins of computing and the people who industrialized information from Hilbert's program through Gödel's proof to Turing's machines.

# **Prerequisites**

Acceptance into the KU Honors Program

#### *Texts*

There are no formal texts for this class. We will use papers from the literature and some informal handouts that I provide.

## Grading

Semester grades will be assigned on a standard 10 point scale. I may curve final grades at the end of the semester. However, I will never curve individual assignments or exams. If I curve and how much I curve is at my discretion. However, I will never curve up -90% and above will always be an "A".

The sole basis for your grade in this course is: (i) preparation and participation in our weekly meetings; and (ii) a moderate sized project. I do not take attendance, but it's pretty difficult to hide. You will be asked to lead discussion one or more times during the semester and there will be several very small projects.

#### Homework

Some preparation for class will be required each week. You will be asked to do some reading, some research, and learn some survival

Class Time: 1:00-2:15 R Location: 108 Nunemaker Instructor: Dr. Perry Alexander

2022 Eaton Hall - 864-8833 208 Nichols Hall - 864-7741

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http://www.ittc.ku.edu/~alex
Office Hours: 2:00-3:00 TR, 2022 Eaton Hall

or by appointment

90-100% A 80-90% B 70-80% C 0-70% F skills for success at KU. You may be asked to take charge of the discussion from time to time, but never alone.

## **Projects**

You will be asked to do a moderate sized project towards the end of the semester. The structure and topic of this project will largely depend on what you want to study further. More details will be provided as the course progresses.

## Web Repository

All homework assignments, exams, solutions and handouts you receive in class are linked to my HNRS 190 homepage. In general, I will not distribute hard copies of labs and homework assignments in class. All documents will be published using the Adobe PDF standard. PDF readers are freely available for Windows, Linux, and MacOS on the Adobe website.

http://www.ittc.ku.edu/~alex/ teaching/hnrs190/

#### **Policies**

Generally, I am quite easy to get along with and I will help however I can. However, I do have are a few things that you should keep in mind during the class that will help us get along.<sup>1</sup>

CLASS PARTICIPATION I do not take attendance in class, however participation in class is important to its success. Please ask questions and participate in class discussions. When assigning final grades, borderline cases will be decided based on class participation.

EMAIL I encourage you to use email to contact me – it is by far the easiest way to find me. I am logged in when I am working and check my mail frequently.

BLOG The course blog is available on the website and via an RSS feed. I will post late-breaking news about projects, homework and class administration on the blog. Either subscribe, or check the website frequently.

Phone Feel free to call me in my office at any time. I would prefer not to be called at home.

Office Hours I will make every effort to be in my office during scheduled office hours. If there are exceptions, I will let you know as <sup>1</sup> The 4 Commandments:

- · Do not whine
- · Do not cheat
- Do not disrespect the TAs
- · Do not tell me what you don't need to know

early as is possible. If you have a conflict with my office hours, please make an appointment or stop by my office at another time. I have an open door policy, you are free to come by whenever you choose. If I am busy, I may ask that you come back later, but please don't hesitate to knock! My schedule is available online.

CHEATING Academic misconduct of any kind will automatically result in a o score on the homework, lab, project, or exam in question and your actions will be reported to the department chair. Your homework, exams and projects must be individually prepared unless otherwise noted. Posting your assignments to Internet discussion lists is considered academic misconduct. Sharing your solutions with others is considered academic misconduct. Turning in solutions from previous semesters is considered academic misconduct. Paying people to prepare solutions is academic misconduct. Automated mechanisms are available for checking the originality of source code. Please spend your time trying to solve assigned problems rather than trying to get around the system. Don't risk it!

Excuses Excusing a missed exam or assignment is left to my discretion. Illness, family emergencies, and religious observances are examples of acceptable excuses. Computer down time, over sleeping, political activities, and social events are examples of unacceptable excuses. Please try to let me know of problems in advance when possible and be prepared to provide verification of your excuse.

EXTENSIONS As a policy, I do not extend due dates of homework and projects. If I choose to do so, I will only announce the extension in class, via email or on the blog. If you hear an extension has been granted and I have not announced it, your information is incorrect. Remember that if I grant extensions early in the semester, it will necessarily compress due dates the end of the semester.