What’s the rule?

There is a rule that some sequences of three numbers obey and some do not. Your job is to guess what the rule is.

I’ll start by telling you that the sequence 2, 4, 8 obeys the rule.

Write a number sequence on your card and I’ll tell you whether it satisfies the rule or not. You can test as many sequences as you want.

When you think you know the rule, describe it in words on the back of the card.
What would you do #1?

In this “game” you can win between $0 and $1000.

Option A: You roll a fair 10-sided die once. If any of the numbers from 1 through 9 show up, you get $0; if 10 shows up you get $1000.

Option B: You refuse to roll the die and you win $100 for doing nothing.

What would you do #2?

In this version of the “game” we the situation is that you can lose between $0 and $1000.

Option A: You still roll a fair 10-sided die once, but now if any of the numbers from 1 through 9 show up, you pay $0; if 10 shows up you have to pay $1000.

Option B: You refuse to roll the die and you just go straight to having to pay $100.
What did those have to do with DCC?

When do you take a risk and how big?

Course Overview

**Individual Journal** – shared via Google Docs with egolubUMD@gmail.com as a “word processing” document.

**Individual and Team Assignments** – some will be in the form of an individual homework assignment, some might be team-based HW, some will take the form of a medium-sized team project.

**Capstone Pre-Proposal, Proposal, and Progress Report** – you’ll see…

**Class participation** – a wide variety of in-class activities related to the topics and the capstone.
Who took these photos?

These animals!
Project Inspiration?

How might Animal-Camera Interaction become a capstone project?
– What would be the required resources?
– What skills would the student need?
– What academic disciplines would come into play?
– What sort of IRB clearance would be required?

What is the scientific method?

One way of describing it could be:
- observe the world and formulate a question
  → state a hypothesis (null=no difference, alt=the interesting thing)
  → make a prediction
  → run an experiment
    → analyze the results to refute the null / support the alt

This depends on empirical/measurable evidence.
Does the “scientific method” apply to all research projects?

No…

Different types of capstone projects…

• "classic" scientific research/exploration in your discipline
• tool/resource building (hardware and/or software) and its evaluation
• implementing something to understand the theory behind it
• expanding on, or accelerating the performance of, existing work
• art installations with a theme/message to convey/share
• social media project with some form of physical or digital outcome
• survey/analysis of existing work on a topic to inform others
• others…