2016

1.0 Day 1 Outline

Chris Bauer
University of New Hampshire, chris.bauer@unh.edu

Follow this and additional works at: https://scholars.unh.edu/day1
Part of the Educational Methods Commons, Scholarship of Teaching and Learning Commons, and the Science and Mathematics Education Commons

Recommended Citation
Bauer, Chris, "1.0 Day 1 Outline" (2016). Day 01. 10.
https://scholars.unh.edu/day1/10

This Report is brought to you for free and open access by the Fire and Ice at University of New Hampshire Scholars' Repository. It has been accepted for inclusion in Day 01 by an authorized administrator of University of New Hampshire Scholars' Repository. For more information, please contact nicole.hentz@unh.edu.
Purpose:
Initiate Ethic of the course
Initiate Processes of the course
  • Break ice personally
  • Make sure syllabus and expectations understood
  • Set ethos of group work and collaboration
  • Do something real pertinent to the topic right away; pique curiosity
  • Model question generation
  • Initiate model of exploring resources (group notes, posting), then apply resources to some application and product
  • Initiate use of BB to post results
  • Initiate reading of something right away as homework from Phil Trans
  • Identify number of people who can bring computers regularly

Physical

Arrange tables, set up video materials, mic on
Set up activity

Board

Welcome to Fire and Ice
Sign in
Find place with your name
Make a stick-on name tag with first name as well
Take a syllabus and look it over
Anyone not already registered, see me now
  Address video and consent

Materials

Syllabus
Name tags
Premade name cards
Poster paper
Poster markers
White board markers
Assignment: Handout provided at class and on BB. Listed below were my initial ideas.

Download PhETs – BB linked; held for after class 2 to worry about.

BB survey: about you

- What are you good at?
- How did you get that way?
- What are you looking forward to in this class?
- What concerns might you have about this class?

On-line surveys: links

- CSCI, ASCI, TOLT?
- Decided to do the first two, plus thermo assessment but not TOLT.

Read: Materials from and concerning 17th Century understandings; these could be looked at before first class as a teaser.

Any readings, bring some notes: never needs to be more than one page. Can be bullet points.
10  Introductions and Icebreakers

15  Self intro – who I am

Interns:  Ben Stewart, Tiffany Hatstat, Sara Edquist, Patrick Kessler
Staff: Julia Chan, Michael Tridenti

Ice-breaker walkabout – same as in PLTL (7 min)  Find someone who ....
Quick show of hands: how many found someone who....

Next, explore class concept, expectations, video documentation work, raise questions.

10  Syllabus Exploration

30  Someone at table hold up the blue folder – you are the group manager
  Find in the folder a set of instructions called “Introduction to the ‘Fire & Ice’ Course”
  Carry out the instructions. You have 10 minutes complete the task.

To save time, instead of having them report out on “what in common”, I just went up to each table and
asked individuals what was found to be unique. This gave me a chance to talk with each person a bit.

[Groups execute activity that develops roles, explores syllabus, and invites questions.]

Address syllabus questions.

Talk about video documentation.
Remind them of the purpose.
The class itself will run. No script. No second takes.
Capturing what happens, how, why. To the extent possible, ignore the cameras. Don’t
play to the cameras – this is not your big break.

All on camera and on audio all the time. It is possible that someone will do or say
something stupid or embarrassing. Although everything will be captured, not
everything will appear in public product. Trust that in editing, we catch and eliminate
unimportant, but human, behaviors. You may want to think about your clothing. Err on
side of conservative and remember camera angles. Catholic and uniforms. I don’t want
to lose valuable footage because showing it would embarrass one of you.
Heat perception activity
separate student handout and instructor script

3 cups: room T, iced, hot water pre-prepared
6 tables x 3 mugs = 18
Collect their work
Starts Question Bank – report out from groups, write on poster paper (poster paper is portable) -- put up several pieces. Keep it with class, and people can add to it each day.

I should take from Spokesperson, and loop around the tables. That’s more lively as people reveal their questions.

Talk about the importance of asking questions. That’s what “to inquire” means.
The essence of science is asking questions.
But the better the question, the more insightful the outcome.
So, science is not just about answering questions.
It’s about finding questions, important questions, to ask.

HAD TO STOP HERE, TIME TOO SHORT FOR NEXT ACTIVITY
This actually gave me time to restructure the activity based on the Question Bank

Exploring resources about sensation of heat

Jigsaw organizational structure
4 table of 4 perfect balance 5 tables of 4 become 4 groups of 5.

Each table will be given a set of materials to read. Only your table has the materials. Identify important facts and relationships. Each person needs to understand. 10 min read, 10 min talk Produce a group report – will be posted on BB with the material – take with you to new group. [This is group accountability.]

Once you develop your expertise, you will be prompted to move to a new group (color of your name tag), where you will address a new question. Each person in the new group will have some unique expertise and information to contribute. [Jigsaw is indiv accountability]

Materials: (in file box) Topics in hand:

Group 1:
A: neuron firing adaptation patterns
B: action potential basics

Group 2:
C: action potential (different source)
D: neuron structure and types

Group 3:
E: thermoreceptors
F:  senses and neurons  
G:  senses and neuron structure  
K:  Thermoreceptors WP -- details  

Group 4:  
H:  regulation, hot/cold sensors  
I:  thermoreceptors and hypothalamus  
J:  hot/cold neurons  

Task for new group:  Create a visual poster that combines your experience with sensing temperature and the information you just read about. You have 20 min to create the poster and get it up on wall.

Monitor time – this activity can go over to next day, but I don’t want it to extend and take up a lot of time. Primarily, this is to give everyone a sense of process.

If time, each group should identify a Spokesperson to walk us through the poster (1 minute). Should we judge which poster does the most effective job? Do a closed eyes poll. [ask for an evaluation, but lower peer pressure and evaluation risk]

Overnight:

Reading about and from Robert Boyle, 17th Century