INTRODUCTORY EXPERIMENTS FROM SCRATCH

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(1) The Augustana “3-11” timetable
(2) IDS 137: a new science course
(3) Research opportunities
Augustana

Undergraduate, liberal arts campus of the UofA, ~1000 students
Starting in 2017-18:
3 week blocks in September and January where students and faculty only have one course
“3-11”

Starting in 2017-18:

11 week sessions in fall and winter where students take up to four courses
3 week block courses

- mandatory First Year Seminar
- allow off campus experiences
- immersive pedagogy
- very few traditional lecture+lab science courses
IDS 137
“Science Laboratory Experiences”
- a lab-only science course for non-science students
- 4 days in each of biology, chemistry, and physics
- focus on scientific literacy, not specific content
4 physics experiments

(1) Measuring fluid viscosity
(2) Determining absolute zero with a gas thermometer
(3) Finding the pattern in musical frequencies with an oscilloscope
(4) Investigating light polarization
skill themes

- following written instructions
- uncertainties in data and results
- making and interpreting graphs
- numeracy
- scientific communication
- philosophy of science
assessment tasks

- short online quizzes prior to labs
- written lab records and reports
- 1-on-1 interviews
- graphing exercises
- other readings and analysis
- web search exercises
Research Opportunity

On the first and last days of the course, we plan to administer a test (graded only for participation) to measure the evolution of scientific skills and attitudes.

What might this test look like?
Ideas? Suggestions? Cautions?
I’d love to hear from you...

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