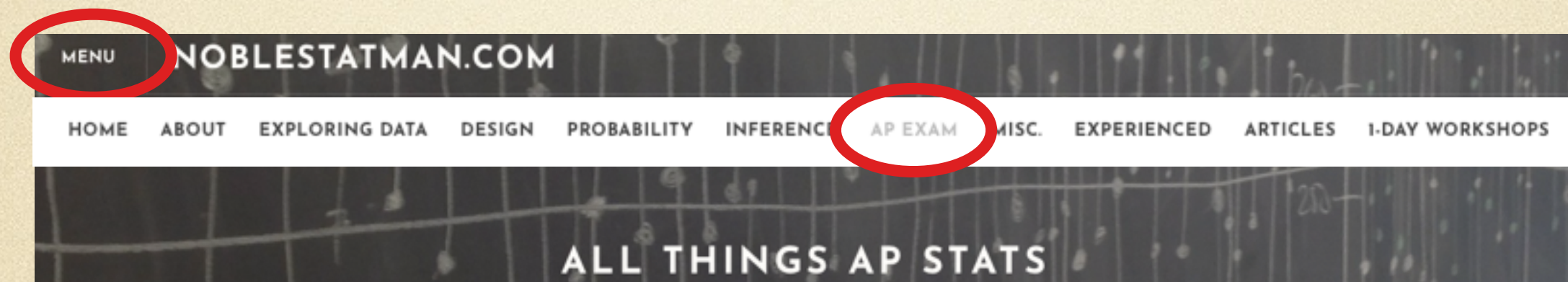


[Focused]
AP Statistics
Exam Prep

Dave Ferris
Noblesville High School
Noblesville, IN
dave_ferris@nobl.k12.in.us

All Handouts:

noblestatman.com



AP Exam Webinar Handouts:

Comparing Boxplots w/sol'n

AP Exam: Experiments w/sol'ns

Choose Inference Procedure

Common Communication Errors

Confidence Interval Wording Quiz

Commonly Asked Regression Q's

AP Exam: Probability w/soln's

Two Inference, One Sampling w/sol'ns

Probability Problem Trail (11)

Presentation Slides

AP Exam: Sampling w/sol'ns

AP Exam: Sampling Distn'ns w/sol'ns

Investigative Tasks '09-'17 w/sol'ns

"You fool..." cartoon video 

Caveats

- I try to review all year long...but I target at end...
- Suburban HS; honors class; 75% sophomores
- 90-minute class every other day
- All students have a 90-minute study hall
- Exam is late this year (May 17)
- I have five 90-minute blocks reserved for review
- We use AP rubrics and scoring all year...
 - E, P, I for **parts**: **E**ssentially/**P**artially Correct, **I**ncorrect
 - **4, 3, 2, 1** for **problems**:
Complete Substantial Developing Minimal
- So you may need at adapt to YOUR unique context

My overall plan:

- Finish probability by Christmas
- Chi-Square and Regression tests after Spring Break
- Leave 2-3 weeks before the exam for **targeted** review

General Advice:

- “Review for the exam” all year long...
Incorporate AP Exam problems early and often!
Expose students to rubrics and scoring system
E, P, I (parts) and 4, 3, 2, 1 (problems)
(Complete, Substantial, Developing, Minimal*)
- Apply to be an Exam Reader (need 3 yrs experience).
- Give students Tough Love—regular and honest feedback on their communication (or lack thereof...).
- Note your students’ weak areas (have **them** note, too) and design your **targeted** review from this info.
* When learning is made **visible** to students, learning is enhanced (John Hattie’s research)

General Advice #2:

- 30-40% of the Exam is over Inference topics!
- Expose them to #6's (Investigative Tasks)
 - Longer
 - Worth more ($1/4$ of FR = $1/8$ of entire exam)
 - Multiple topics
 - Designed to “stretch” students; can they apply what they have learned?
 - Multiple “entry points”
 - Readers are told: “Don’t sweat the small stuff...”
 - ANY credit earned on #6 is worth more...
- 2017 Problem Averages:
1.726 **2.228** 1.724 1.718 1.518 **0.9952**

Details:

- I give full MC and FR exams during **two** 90-minute blocks. I grade the FR using rubrics and hand back to students (usually over a weekend).
- I target known trouble-spots:
 - Probability and Experimental Design
- Other review packets:
 - Several #6's with solutions
 - Full MC exams (great mixed review)
 - Full FR exams (practice plan of attack)
 - A few hand-picked FR questions on other topics
 - Common Communication Errors Packet
 - Confidence Interval Wording
 - Choosing Inference Procedures

RTI: Intervention for strugglers

- Get official list of those who registered for exam
- Identify those whose grades are B-minus or worse
- Ask them to come in every study hall to complete **five** MC problems.
- ...preferably in small groups of friends
- I sort MC problems from Secure Exams...
- Start with 5 “low-hanging fruit,” and work toward harder problems.
- Students will reflect and take notes after every session of five Q's



AP Stats hypothesis test mistakes

<https://www.youtube.com/watch?v=RN6qa3PxGU0&t=178s>