

AP Statistics Summer Institute
at Villanova University
July 13-16, 2020

This workshop is designed for teachers of AP Statistics, new and experienced. The theme is collaboration. After taking this course, you will...

- Understand the scope of the AP Statistics course
- Learn tips for managing the AP Statistics curriculum
- Become familiar with the AP Statistics exam
- Become familiar with the AP reading process
- Learn to use the TI-84 and appropriate other technologies

Due to the COVID-19 pandemic, Villanova has moved all classes online.

This workshop will be held online via Zoom. The morning sessions will be from 8:30 – 11:30am each day. You are expected to be online at that time. The afternoon sessions will be from 1 - 4pm and be asynchronous (you are not required to attend). The Zoom room will be available during the afternoon session for those that wish to use it. We have also added evening office hours.

There are four foundational themes for AP Statistics: design of experiments, exploratory data analysis, probability, and inference. We will explore these strands of content in relationship to the technologies and pedagogical strategies we can employ to have our students succeed on the AP Statistics examination. The role of the College Board and ETS in the administration of the AP program will be presented, and there will be an overview of the AP syllabus content with emphasis on topics of concern to participants. A complete review of the scoring of the AP examinations in the traditional format will be given as well as suggestions if this year's 'new normal' stays normal for longer than expected. The focus is on bringing the best teaching techniques and strategies to the classroom. You will need a laptop and access to the internet for our synchronous and asynchronous sessions. You will receive electronic copies of the most popular textbooks as well as hard copies of the AP Statistics CED and scoring samples of the 2019 examination.

Please register at www.tinyurl.com/CSEWorkshop

Early Registration by June 1: \$595

Late Registration after June 1: \$695

(We offer a 20% discount for Catholic School teachers)

In addition to registering on our website, **all participants need to register through the [College Board website](#) as well.** [Scholarships](#) are available. This workshop can also be taken as a **3-credit graduate course** (MAT 7111 – AP Statistics Workshop). If you are interested in this option, please [contact us](#).

Comments from Previous Workshops

“I have been fortunate to attend many AP 1-day workshops and other professional sessions during my career. Rarely have I had the pleasure of the professionalism, knowledge and prior preparation that [Rev Dr. Joseph Oechsle] exhibited. Joe is a master teacher, and his passion for teaching and the subject was evident. I shall gladly recommend Joe to any colleague searching for excellent instruction.”

Tentative Schedule

| Day | Time | Topics |
|-----------|------|---|
| Monday | AM | Overview of the course; beginning and organizing the course; simulation and the logic of inference; focus on design of experiments; the structure and grading of the traditional exam |
| | PM* | Guided overview of CED; exercises in analyzing and grading design of experiments exam questions; a first encounter with the Rossman blog 3pm – Check-in on Zoom (attendance required) |
| | Eve | (optional) An opportunity to clarify/discuss what happened in the synchronous session, the asynchronous materials, your concerns and needs as you prepare for the next academic year |
| Tuesday | AM | Reinforcement and clarification of DOE issues with examples and guided practice; overview of exploratory data analysis; introduction to probability; more simulation. |
| | PM* | Practice analyzing and grading classic design of experiments questions; CED – course units, skills, and planning; the Rossman blog II. |
| | Eve | (optional) Clarify and extend the synchronous and asynchronous and your questions for your course |
| Wednesday | AM | Focus on simulation and probability; emphasis in AP stats; sampling distributions; examples and analysis of past ‘traditional’ exam questions; introduction and overview of inference |
| | PM* | Overview of AP Classroom; grading and analysis of selected probability questions; Rossman blog III; explore your text and compare the ebooks |
| | Eve | (optional) Issues and concerns from today’s work as well as your prep |
| Thursday | AM | Developing inference Activities to reinforce inference |
| | PM* | Web resources; Structured review Preparation for MC exam questions Evaluations and Wrap-up |
| | Eve | (optional) |

About the Instructor

Rev. Dr. **Joseph Oechsle** has taught at the Malvern Preparatory School for 38 years - AP Calculus AB and BC, AP Statistics, AP Latin, AP German, Comparative Religions, Logic, Introduction to Philosophy, and all levels of mathematics. He also serves as an adjunct in mathematics at St. Joseph's University, Villanova University, and Montgomery County Community College. He is a faculty consultant to the College Board in AB Calculus AB and BC and in AP Statistics and presents annually in the Kentucky Science and Technology Corporation program for rural public schools, and Project Reach in New York. He has read the AP Calculus and AP Statistics examinations and now is an AP Table Leader in Statistics. He has been an active member of the Norriton Fire Company for 40 years.

