



TRAINING SYLLABUS

Statistics for Forensic Analysts

Course Name: Statistics for Forensic Analysts

Forensic science is the systematic and coherent study of traces to address questions of authentication, identification, classification, reconstruction, and evaluation for a legal context. In the forensic science context, a trace is any modification, subsequently observable, resulting from an event. Statistics play an important and expanding role in criminal investigations, prosecutions and trials, not least in relation to scientific evidence produced by forensic science practitioners.

Correctly identifying and interpreting statistical data used in a forensic science setting is vital to the systematic and coherent administration of justice. In the current state of affairs, a majority of forensic analysts in the physical sciences, and a significant minority of those in the natural sciences are not proficient in this fundamental aspect of their science. Instruction is thus required to bring the population of analysts to competency.

Educational opportunities for forensic analysts are generally limited to their specific work domains. For those seeking to increase their knowledge and gain proficiency in quantitative analysis and statistics, no forensic science specific programs exist ... until now. To address this problem, Apex Partners, Ltd., has created just such a program of instruction. Given the learner population will be mid-career adults that are not in a specific geographic area, we have created a program that is delivered on-line, via a micro-learning model.

The objective of the course is to equip forensic analysts to become responsible producers and discerning consumers of statistics and confident exponents of elementary probabilistic reasoning. It is a question of each participant in judicial proceedings being able to grasp at least enough to perform their respective allotted roles effectively in the interests of justice.

To sign-up, call us today at 702-570-2456, email us at training@apexpartnersltd.com, or visit us on-line at apexpartnersltd.com.

Location: apex.learnupon.com

Date: Continuous

Duration: Equivalent to 40 hours of classroom instruction.

Learners have 60 days to complete the course.

Instructor Information

Instructor:
Jim Hoerricks, PhD

Contact Number:
702.570.2456

e-mail:
jim@apexpartnersltd.com

Apex Learning ©2018-2019 Apex Partners Ltd.
USA: 8560 S Eastern Ave, Ste 250, Las Vegas, NV 89123
EUR: Lurikeen OÜ, Sepapaja 6, Tallinn, 15551, Estonia
Ph: 702-570-2456 • e: info@apexpartnersltd.com



TRAINING SYLLABUS

Statistics for Forensic Analysts

General Information

Expectations and Goals

Analysts may have prior knowledge and skills in the general domain of their respective science. This knowledge can serve as a foundation for the knowledge and skills gained from instruction. Whereas learners may have previously relied upon the “visual accuracy” of their experiments for court room presentation experiences, they will move beyond the “seeing is believing” paradigm when applying the principles of statistics and elementary probabilistic reasoning. In doing so, the analysts will be able to move beyond their prior knowledge of the **truth** of what they see towards the **facts** supported by the data that they analyze.

There are two fundamental goals to the instructional program, understanding and correctly applying the information in order to pass a state license examination and then understanding and correctly applying the information in practice. Given the jeopardy involved in the justice system, and the fact that mistaken conclusions can lead to improper outcomes, it is hoped that learners will achieve higher scores than the minimum needed for passing the tests. Nevertheless, as an instructional goal, the analyst will correctly answer at least 70% of questions presented to them on the course’s summative assessment.

Requirements and Materials

Apex Learning’s environment is entirely on-line. All required resources will be provided within the learning modules.

We support the latest and prior version of these modern browsers as listed below. These are supported across Windows, Mac OS, iOS, and Android.

- Chrome
- Firefox
- Safari
- Internet Explorer
- Edge



TRAINING SYLLABUS

Statistics for Forensic Analysts

Course Schedule

Module	Topic	Type	Duration
Module 1	Introduction: <ul style="list-style-type: none"> • Empirical Research • Sampling • Scales and Measurement • Types of Statistics 	Mixed - Video / Text	5 Hours
Module 2	Descriptive Statistics: <ul style="list-style-type: none"> • Frequencies, Percentages, and Proportions • Distributions • Mean, Median, and Mode • Ranges • Standard Deviation 	Mixed - Video / Text	6 Hours
Module 3	Correlational Statistics: <ul style="list-style-type: none"> • Correlation • Relationship (Pearson r) • Determination (Pearson r) 	Mixed - Video / Text	6 Hours
Module 4	Inferential Statistics: <ul style="list-style-type: none"> • Random Sampling • Sample Size • Errors / Limitations • Null Hypothesis • t Tests • F Tests • χ^2 Tests 	Mixed - Video / Text	7 Hours
Module 5	Probability: <ul style="list-style-type: none"> • Objective Probability • Subjective Probability 	Mixed - Video / Text	8 Hours
Module 6	Statistics and Forensic Science: <ul style="list-style-type: none"> • Fundamentals of Probability and Statistical Evidence • Inferential Reasoning in Forensic Science 	Mixed - Video / Text	8 Hours
Exam	Summative Assessment	Selective Response / True-False	1 Hour
Totals			40 Hours

Costs and Other Details:

Cost per learner: US\$595.00.

Volume discounts are available for agency purchases.

Country specific pricing available in AUD, BGN, BRL, CAD, CHF, CZK, DKK, EUR, GBP, HKD, HRK, HUF, INR, JPY, NOK, NZD, PLN, RON, SEK, SGD, and USD. E-mail for details and pricing.

Apex Learning ©2018-2019 Apex Partners Ltd.
 USA: 8560 S Eastern Ave, Ste 250, Las Vegas, NV 89123
 EUR: Lurikeen OÜ, Sepapaja 6, Tallinn, 15551, Estonia
 Ph: 702-570-2456 • e: info@apexpartnersltd.com