

**FDP**  
INSTITUTE

**Webinar**

**FDP Exam Prep:  
Kaplan Schweser  
OnDemand Review  
Package**

**July 11, 2022 @ 11 AM ET**

**Dr. Hossein Kazemi, CFA**  
Senior Advisor, FDP Institute

**Dr. Greg Filbeck, CFA, FRM, CAIA,  
CIPM, FDP, PRM**  
Director, Black School of Business

**Eric Smith, CFA, FRM, FDP**  
Director Product Development,  
Kaplan

Welcome

We will begin promptly at 11 AM ET

Please add your questions to the chat box, we will address them during the Q&A.

If you are unable to hear the speakers, just let us know in the chat box.

You can find a copy of the slide deck and a recording of this webinar:

[www.fdpinstitute.org/webinars](http://www.fdpinstitute.org/webinars)  
[www.caia.org/caia-infoseries](http://www.caia.org/caia-infoseries)



# Financial Data Professional Institute

FDP Institute provides world class training and education to financial professionals to meet the accelerating needs of digital transformation in the industry.





# FDP & Kaplan Schweser Discuss the OnDemand Review Package

Dr. Hossein Kazemi, CFA

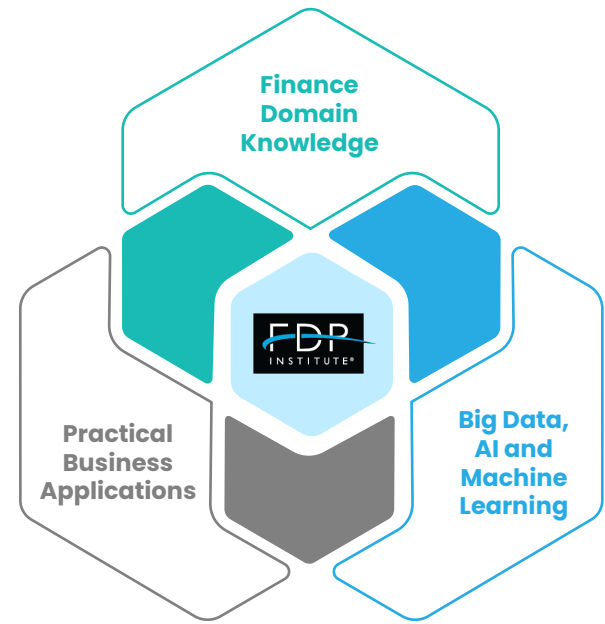
Dr. Greg Filbeck, CFA, FRM, CAIA, CIPM, FDP, PRM

Eric Smith, CFA, FRM, FDP

# The FDP Institute

## *The FDP Charter*

- The FDP is a self-study program that provides financial data professionals with an efficient path to learning the essential aspects of financial data science.
- It introduces candidates to artificial intelligence, machine learning, and big data, and their roles in the financial industry.
- Candidates earn the FDP charter once they pass the FDP exam and complete two online classes, which can be done before or after the exam.
- The FDP curriculum is consistent with recent advances in the applications of data science within the financial industry.





# FDP Exam

- FDP Institute recommends 200 hours or more of study time.
- Four-hour computer-based exam session (divided into two sections)
- Administered by FDP Institute® twice a year (Q2 and Q4)
- *Session 1*: multiple-choice questions (75% weight)
  - Each question includes three to four answer choices
- *Session 2*: constructed response (essay-type) questions (25% weight)
  - Each question is presented in two to three parts

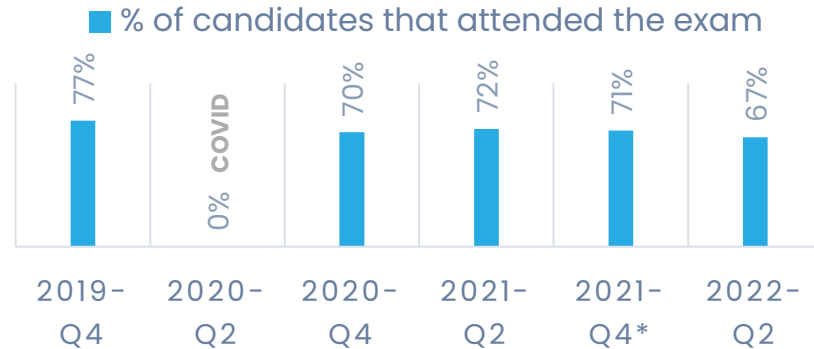


# Testing Options

- The FDP exam is administered via computer through Prometric.
- Prometric offers test centers around the world and through their remote proctor testing platform, which offers the ability to test from your home or office.
- Registered candidates have two options to take the FDP exam:
  - *Option 1:* Prometric Testing Center
  - *Option 2:* Remote Proctoring Testing

# Exam Results

- Candidates who earn 70% or more of the total points will pass.
- FDP Institute does not have a target passing rate (in other words, the passing rate could be lower than 70%).
- Exam results are released within five weeks of the last exam day.
- Exam results include a Candidate Performance Report indicating relative performance (compared to average) among exam topics.



# FDP Curriculum

## TOPICS

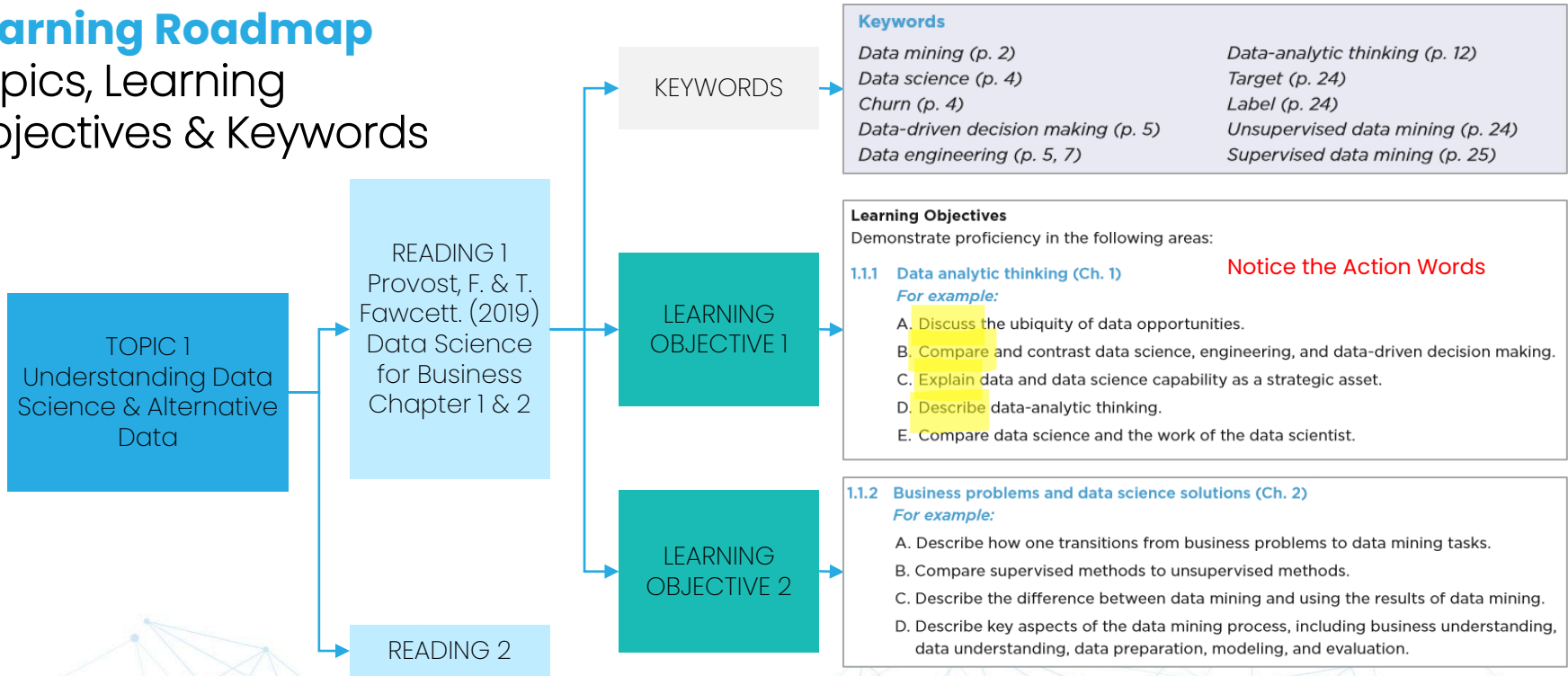
## Approx Weight %

<b>1.</b> Introduction to Data Science	5-12
<b>2.</b> Linear & Logistic Regression, Support Vector Machines, Regularization, and Time Series	10-15
<b>3.</b> Decision Trees, Supervised Segmentation, and Ensemble Methods	10-15
<b>4.</b> Classification, Clustering, and Naïve Bayes	5-12
<b>5.</b> Neural Networks and Reinforcement Learning	5-12
<b>6.</b> Performance Evaluation, Back-testing, and False Discoveries	5-12
<b>7.</b> Text Mining	5-12
<b>8.</b> Ethical & Privacy Issues	5-12
<b>9.</b> Fintech Applications	25-40



# Learning Roadmap

## Topics, Learning Objectives & Keywords



# FDP Curriculum Concepts

- Supervised learning
  - Linear and logistic regression
  - Time series models
  - Decision trees
  - Support vector machines
  - Neural networks
- Unsupervised learning
  - Clustering
- Reinforcement learning
- Overfitting
- Regularization
- Performance evaluation
- Text mining
- Natural language processing
- Ethical and privacy issues
- Data science applications in the financial industry

# Kaplan Schweser FDP Exam Review Course

- Online instruction designed to cover the most recent FDP curriculum
- Led by Dr. Greg Filbeck, CFA, FRM, CAIA, CIPM, FDP, PRM
- Addresses all topics and readings as well as most LOs and keywords outlined in the FDP Candidate Study Guide
- OnDemand video sessions can be viewed at any time
- Includes downloadable handouts for each class presentation

# Review Course Example 1

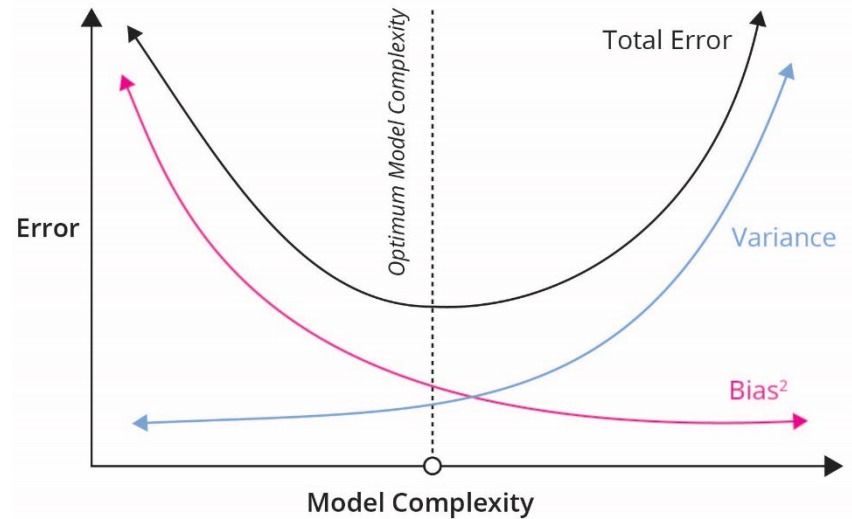
- **Simple linear regression** is used to predict a quantitative response (Y) with a single predictor (X)
- This linear model incorporates an *intercept* and a *slope* coefficient
- A **population regression line** is the best linear approximation for the actual (true) relationship between X and Y:

$$Y = \beta_0 + \beta_1 X + \varepsilon$$

where:  $\beta_0$  is the intercept,  $\beta_1$  is the slope, and  $\varepsilon$  is the error term

# Review Course Example 2

- The balance between overfitting and underfitting the data is known as the **bias-variance tradeoff**
- **Bias** results from missing relevant relationships (i.e., underfitting)
- **Variance** results from reflecting random noise (i.e., overfitting)
- A *linear model* will likely underfit the training set (increasing bias)
- A *complex model* will likely overfit the training set (increasing variance)



# Review Course Example 3

Given the following features, **compute** the **Euclidean distance**:

Name	Age	Years at Current Address	Residential Status
Person 1	25	3	Renter = 2
Person 2	40	10	Owner = 1

$$\begin{aligned} &= \sqrt{(d_{1,A} - d_{1,B})^2 + (d_{2,A} - d_{2,B})^2 + (d_{3,A} - d_{3,B})^2} \\ &= \sqrt{(25 - 40)^2 + (3 - 10)^2 + (2 - 1)^2} = 16.58 \end{aligned}$$

# Additional Kaplan Schweser FDP Products

- **Activity Feed:** study plan for completing each review course task
- **Topic Quizzes:** practice questions for each topic area
- **Formula Sheet:** collection of key formulas to memorize for the exam
- **Mock Exam:** simulates the computer-based testing experience

# Exam Resources

- See FDP Institute's website ([fdpinstitute.org](http://fdpinstitute.org)) for the following:
  - Exam registration information
  - Exam appointment information
  - Candidate Study Guide
  - Candidate Handbook
  - Curriculum materials
  - Sample questions
- Kaplan Schweser FDP materials can be found at: [schweser.com/FDP](http://schweser.com/FDP)



# Q & A

<https://fdpinstitute.org/Webinars/>



Join Us for our Next Webinar:

**Algorithmic Trading and Machine Learning  
for Cryptoassets**

**Date:** July 14, 2022 @ 12 PM ET

Register using QR Code Now



**WEBINAR** **Algorithmic Trading and Machine Learning for Cryptoassets** 

 **Keith Black**,  
PhD, CFA, CAIA, FDP  
Managing Director, Program  
Director, FDP Institute

 **Alan Waldman**  
Co-Founder,  
Pareto Frontier Capital

**July 14, 2022**  
**12 PM ET**



# Thank You



## Contact Us:



[fdpinstitute.org](https://fdpinstitute.org)



[info@fdpinstitute.org](mailto:info@fdpinstitute.org)



[@FDPIInstitute](https://twitter.com/FDPIInstitute)



[linkedin.com/company/FDP Institute](https://linkedin.com/company/FDP%20Institute)