

# Curriculum Mastery with IFT ILEX

IFT ILEX is the IFT Improved Learned Experience. Through ILEX, we are sure that your **learning, retaining and mastery** of the CFA Program Level I curriculum will improve.

To reach the goal of 'Curriculum Mastery', IFT recommends that you follow our **4 key steps**. For each reading of the curriculum, you should do the following with the help of ILEX features:

**1. Learn.** Understand the concepts clearly. Watch the lecture videos attentively. Follow examples carefully. Recap the key concepts by reviewing the summary slides presented after the video.

**2. Practice.** Quiz yourself on the basic concepts being explained in **each lecture**. Reference to the learning outcomes and sections (from curriculum) are provided. Check your answer and see the explanation.

**3. Test.** After watching all the lectures for a reading, take the test to see if you have mastered the contents of the reading. You should be scoring above 60% and ideally above 70% on the tests.

**4. Track Progress.** After each test, you can view your progress for each reading by clicking the [View Transcript](#) button. Your goal is to attain above 70% for each reading!

*IFT recommends that you only consider yourself having studied any reading or completed any topic when you are able to do well on the Test for that reading. So, use our transcript to keep track of your progress.*

Each of the ten topics for the Level I exam is covered in an ILEX Course. In this guide we are looking at the ILEX course for Quantitative Methods.

ILEX is not a Free product from IFT. The ILEX system is included in Level I Basic-Plus and Premium packages. If you want to just buy only the ILEX system, you can visit link: <https://ift.world/product/ilex-package/>

However, ILEX for the Quantitative Methods topic **is FREE** for anyone signed up with IFT. Click on this link to start using it now: <https://ift.learnrev.com/courses/5b423eb49ab1f29788fa6015/>

Next, we will walk you through each of the above steps in more detail. All the images are from the IFT Learning Portal : <https://ift.learnrev.com>

# Learn

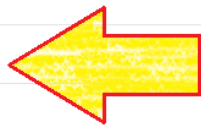
For each reading you will find detailed lecture videos. We have broken up each reading into multiple lectures (e.g. Lecture 1, 2, etc)

First watch the video for Lecture 1. You can print out the slides provided and write your own notes on them. See the image below from ILP (IFT Learning Portal)

The screenshot displays the IFT Learning Portal interface. At the top, the header includes the IFT logo and the text '2019 Level I Quantitative Methods ILEX'. Below the header, there are navigation tabs: 'Learn', 'Syllabus', 'Announcements', and 'Test Results'. The main content area is titled 'Contents' and lists seven topics: 1. Introduction, 2. Interest Rates: Interpretation, 3. The Future Value of a Single Cash Flow, 4. The Future Value of a Series of Cash Flows, 5. The Present Value of a Single Cash Flows, 6. The Present Value of a Series of Cash Flows, and 7. Solving for Rates, Number of Periods, or Size of Annuity Payments. A yellow callout box on the right side of the list contains the text: 'For each reading you will find detailed lecture videos. First watch the video for Lecture 1. You can print out the slides provided and write your own notes on them.' On the left side of the interface, there is a sidebar with a 'Content' menu. Under the 'R06 Time Value of Money' section, 'Lecture 1' is selected, showing a video player with the title 'R06 Time Value of Money - Lecture 1.mp4 (00:13:18)' and links to 'Summary R06-1.pdf' and 'L1 R06 Quiz1'. Other sections in the sidebar include 'Lecture 2', 'Lecture 3', 'Lecture 4', 'R06 Test', 'R07 Discounted Cash Flow Applications', 'R08 Statistical Concepts and Market Returns', and 'R09 Probability Concepts'. The video player at the bottom shows the IFT logo and the URL 'www.ift.world'.


You will find the downloadable slides (used in the videos) located after the list of readings. If there are any additional videos or materials, you will also find them here. See the image below.

Content
<a href="#">R06 Time Value of Money</a>
<a href="#">R07 Discounted Cash Flow Applications</a>
<a href="#">R08 Statistical Concepts and Market Returns</a>
<a href="#">R09 Probability Concepts</a>
<a href="#">R10 Common Probability Distributions</a>
<a href="#">R11 Sampling and Estimation</a>
<a href="#">R12 Hypothesis Testing</a>
<a href="#">R13 Technical Analysis</a>
<a href="#">Video Slides</a>
<a href="#">IFT Calculator Tutorials</a>



After you watch the video for Lecture 1, you should review the Summary slide which comes up next. There may be multiple summary slides for each Lecture. These present the Learning Outcomes (L.O.), which come directly from the Level I curriculum. This is followed by a further explanation provided by IFT.

See the image below from ILP.


2019 Level I Quantitative Methods ILEX

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Content

R06 Time Value of Money

Lecture 1

- R06 Time Value of Money - Lecture 1.mp4 (00:13:18)
- Summary R06-1.pdf**
- L1 R06 Quiz1

Lecture 2
Lecture 3
Lecture 4
R06 Test
R07 Discounted Cash Flow Applications
R08 Statistical Concepts and Market Returns
R09 Probability Concepts
R10 Common Probability Distributions

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### Lecture 1 Summary

**LO.a: Interpret interest rates as required rates of return, discount rates, or opportunity costs.**

An interest rate is the required rate of return. If you invest \$100 today on \$110 after one year, the required rate of return is 10%.


If the future value (FV) at the end of Year 1 is \$110, you can discount at 10% (PV) of \$100. Hence, 10% can also be thought of as a discount rate.

Finally, if you spent \$100 on taking your spouse out for dinner you gave up 10%. Thus, 10% can also be interpreted as an opportunity cost.

**LO.b: Explain an interest rate as the sum of a real risk-free rate, and a premium for investors for bearing distinct types of risk.**

Interest rate = Real risk-free interest rate + Inflation premium + Default risk premium + Maturity premium.

Nominal risk free rate = real risk free rate + inflation premium



After watching the video for Lecture 1, review what you learned with summary slides. Learning Outcomes (L.O.) from the curriculum with additional notes.

## Practice

Learning without practice is a sure recipe for failure! So, in ILEX we integrate practice with your studies.

After the video and summary, you will take a short ‘Quiz’ to make sure you have understood the concepts from the lecture. You will find 3 or 4 questions here. See the image below.

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R06 Time Value of Money

Lecture 1

- R06 Time Value of Money - Lecture 1.mp4 (00:13:18)
- Summary R06-1.pdf
- L1 R06 Quiz1**

Lecture 2

Lecture 3

Lecture 4

R06 Test

R07 Discounted Cash Flow Applications

R08 Statistical Concepts and Market Returns

R09 Probability Concepts

### L1 R06 Quiz1

Question: 1 / 3      L.O: a      Q-Code: L1-QM-TVOM-056      [Feedback](#)

Interest rates can be *least likely* interpreted as:

- ☐ A discount rates.
- ☐ B opportunity costs.
- ☐ C sunk costs.

[Submit](#)      [Skip Question](#)

After the video and summary, you will take a short 'Quiz' to make sure you have understood the concepts from the lecture. You will find 3 or 4 questions here.

At the end of the 'Quiz', you can find out if your answers were correct or wrong along with the explanation.

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Content

R06 Time Value of Money

Lecture 1

- R06 Time Value of Money - Lecture 1.mp4 (00:13:18)
- Summary R06-1.pdf
- L1 R06 Quiz1

Lecture 2

- R06 Time Value of Money - Lecture 2.mp4 (00:26:3)
- Summary R06-2.pdf
- L1 R06 Quiz2**

Lecture 3

- R06 Time Value of Money - lecture 3.mp4 (00:27:30)
- Summary R06-3.pdf
- L1 R06 Quiz3

Lecture 4

- R06 Time Value of Money - lecture 4.mp4 (00:12:55)
- Summary R06-4.pdf
- L1 R06 Quiz4

R06 Test

R07 Discounted Cash Flow Applications

R08 Statistical Concepts and Market Returns

R09 Probability Concepts

R10 Common Probability Distributions

**Wrong**

Explanation:

B is correct. Use the EAR (effective annual rate) to compare the investments:

Effective annual rate for discrete compounding:

where:

$$EAR = (1 + \text{Periodic interest rate})^m - 1$$

where

m = number of compounding periods in one year

- For daily compounding, m = 365
- For monthly compounding, m = 12
- For quarterly compounding, m = 4
- For semiannual compounding, m = 2

Effective Annual Rate for continuous compounding:

$$EAR = e^{r_s} - 1$$

where  $r_s$  = stated annual interest rate

Instrument	Formula	EAR
Instrument 1	$(1 + .062/12)^{12} - 1$	6.379%
Instrument 2	$(1 + .0625/4)^4 - 1$	6.398%
Instrument 3	$e^{(.060 \times 1)} - 1$	6.183%

Section 3. LO. c.

At the end of the 'Quiz', you can find out if your answers were correct or wrong along with the explanation

# Test

After you have studied all the Lectures which make up a reading, take the test to see if you have mastered the contents of that reading. Your score should be above 60% and ideally above 70% on the tests.

The screenshot displays the IFT 2019 Level I Quantitative Methods ILEX interface. The top navigation bar includes the IFT logo, the course title, and tabs for Learn, Syllabus, Announcements, and Test Results. The left sidebar shows a content menu with sections for R06 Time Value of Money (Lectures 1-4, Summary, Quiz), R06 Test (R06 TVOM Test-2), R07 Discounted Cash Flow Applications, R08 Statistical Concepts and Market Returns, R09 Probability Concepts, and R10 Common Probability Distributions. The main test area shows the test name 'R06 TVOM Test-2', the number of questions (20), and a test clock (00:00:18). It includes buttons for Start, Stop, Reset, and Continue. The test content displays four questions with multiple-choice options. A yellow callout box on the right side of the test area contains the text: 'Take the test to see if you have mastered the contents of the reading. Your score should be above 60% and ideally above 70% on the tests.'

**Question: 1** L.O: a Q-Code: L1-QM-TVOM-002 Review Later

Which of the following is *least likely* to be an accurate interpretation of interest rates ?

- ☐ A The rate needed to calculate present value.
- ☐ B Opportunity cost.
- ☐ C The maximum rate of return an investor must receive to accept an investment.

**Question: 2** L.O: b Q-Code: L1-QM-TVOM-005

The maturity premium can be best described as compensation to investors for the:

- ☐ A risk of loss relative to an investment's fair value if the investment needs to be converted.
- ☐ B increased sensitivity of the market value of debt to a change in market interest rates.
- ☐ C possibility that the borrower will fail to make a promised payment at the contracted time.

**Question: 3** L.O: b Q-Code: L1-QM-TVOM-008

You are estimating the required rate of return for a particular investment. Which of the following premiums is most likely to be included in the required rate of return?

- ☐ A Inflation premium.
- ☐ B Maturity premium.
- ☐ C Nominal premium.

**Question: 4** L.O: c Q-Code: L1-QM-TVOM-011 Review Later

Which of the three alternative one-year certificates of deposit (CD) shown below has the *highest* effective annual rate (EAR)?

	Compounding frequency	Annual interest rate
CD1	Monthly	8.20%
CD2	Quarterly	8.25%
CD3	Continuously	8.00%

After each test, you can view the results. You view them by clicking on the “Test Results” tab as shown below. Here you can review or delete the tests you have given.

Note that for most readings ILEX provides you with 2 tests. If you attempt Test-1, you will be presented with Test-2 the next time you click on the same reading’s test. If you want to do Test-1 again, then first “Delete” it from the menu shown below. Then go back to the “Learn” tab and refresh your browser.

Both Test-1 and Test-2 are of equal difficulty and obtaining a higher than 60% score on either test will demonstrate a good understanding of the reading.

## Your Results

Date	Time	Title	Total Qs	Correct	Wrong	Time Taken	Actions
13-02-2019	19:53:31	R06 TVOM Test-2	20	0	20	00:06:58	<a href="#">Review</a> <a href="#">Delete</a>
15-03-2019	00:49:25	R06 TVOM Test-1	20	6	14	00:25:49	<a href="#">Review</a> <a href="#">Delete</a>
04-04-2019	11:20:49	R07 DCFA Test-1	20	1	19	00:00:17	<a href="#">Review</a> <a href="#">Delete</a>

After each test, you can view the results.  
Here you can review or delete the tests you have given.

## Track Progress

Since the CFA Level I curriculum is vast, you must ensure that you keep your exam preparation **on track**. You can view your progress by clicking the “View Transcript” button. You can press this button directly after you take a test. You also have the option to “re-take” the test.

## Content

R06 Time Value of Money

R07 Discounted Cash Flow Applications

R08 Statistical Concepts and Market Returns

R09 Probability Concepts

Lecture 1

Lecture 2

Lecture 3

Lecture 4

R09 Test

R09 PRCO Test-2

R10 Common Probability Distributions

R11 Sampling and Estimation

R12 Hypothesis Testing

R13 Technical Analysis

## R09 PRCO Test-2

Date: 16/07/2019

Time: 13:57:54

## Your Results

Time Taken 00:00:00

Correct 1

Wrong 19

Total 20

You scored: 5.00%

It is highly recommended that you study this reading again and watch the IFT example videos for this reading. Then repeat the test.

[View Transcript](#)[Retake](#)

## Questions

Question: 1

L.O: b

Q-Code: L1-QM-PRCO-003

[Feedback](#)

If an analyst estimates the probability of a stock earning at least the 5-year market average return using relative frequency from historical data, then the resulting probability is *best* known as:

- ☒ A a priori.
- ☐ B empirical.
- ☐ C subjective.

Your answer was **Wrong**.

Explanation:



## My Transcript

[Toggle All](#)

### Topic: Quantitative Methods

Reading	Test Score (%)	Proficiency	Test Name	Date Taken	Review Test
R06 The Time Value of Money	0.00	You need to improve!	R06 TVOM Test-2	Wed Feb 13 2019	<a href="#">Review</a>
R07 Discounted Cash Flow Applications	5.00	You need to improve!	R07 DCFA Test-1	Thu Apr 04 2019	<a href="#">Review</a>
R08 Statistical Concepts and Market Returns	N/A	N/A	N/A	N/A	
R09 Probability Concepts	N/A	N/A	N/A	N/A	
R10 Common Probability Distributions	N/A	N/A	N/A	N/A	
R11 Sampling and Estimation	N/A	N/A	N/A	N/A	
R12 Hypothesis Testing	N/A	N/A	N/A	N/A	
R13 Technical Analysis	N/A	N/A	N/A	N/A	

### Topic: Economics

### Topic: FRA

### Topic: Corporate Finance

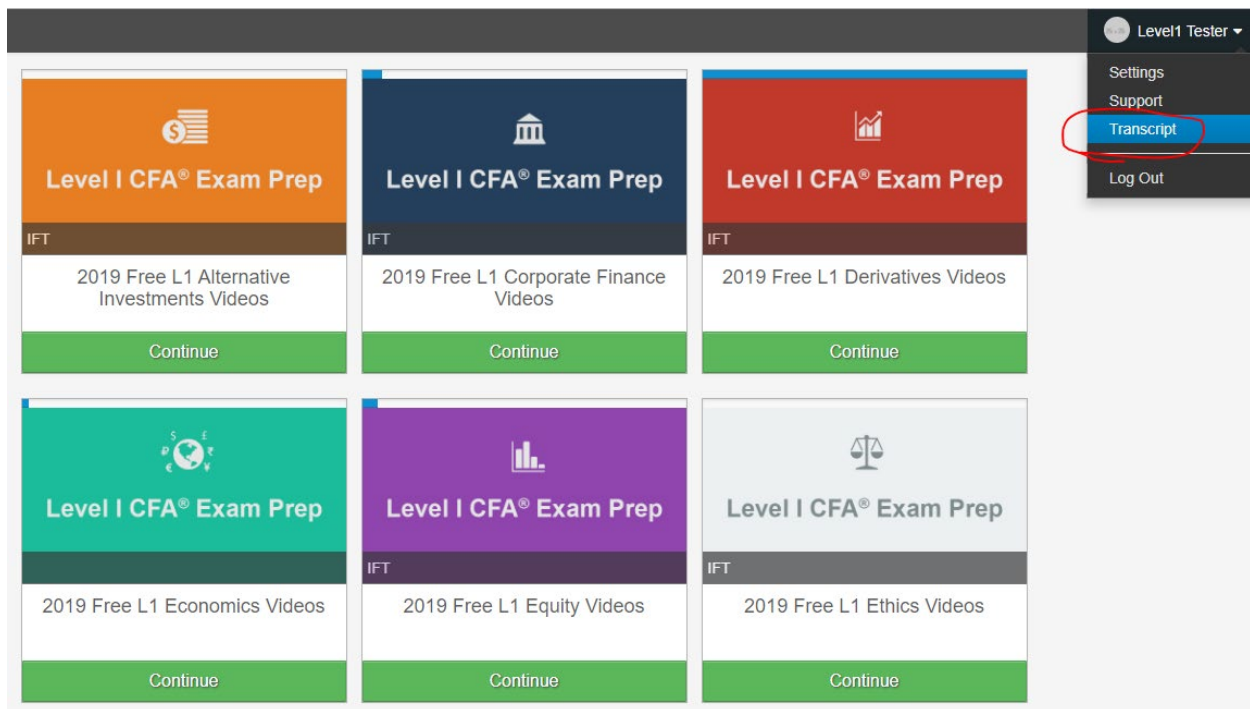
### Topic: Portfolio Management

After each test, you can view your progress for each reading by clicking the **View Transcript** button.

From the transcript you can see your progress at a high level.

**IFT recommends that you only consider yourself having studied any reading or completed any topic when you are able to do well on the Test for that reading.**

You can go to the Transcript by selecting it from the menu located under your name. See the below picture.



Once you feel you have a good mastery over any topic (e.g. Quantitative methods) then you should proceed to test your learning at the topic level. You can do this via **IFT Topic Exams**.

If you need access to the Topic exams then please check your learning portal account or visit [www.ift.world](http://www.ift.world) or contact IFT Support team.

We welcome your questions and feedback. Simply create a support ticket via the URL below:

<https://ift.freshdesk.com/support/tickets/new> (or email us at [support@ift.world](mailto:support@ift.world))

Good luck on your exam preparation!