Stevens Institute of Technology

School of Business

**AACSB
ASSURANCE OF LEARNING**

**Master in Finance**

**LEARNING GOAL # 3**

**Students will achieve mastery of the technical and basic quantitative methods required for the Finance domain.**

**Responsibility: Dragos Bozdog**

February 2018

**TABLE OF CONTENTS**

[1. INTRODUCTION: LEARNING GOAL #3 3](#_Toc505941251)

[2. LEARNING OBJECTIVES AND TRAITS 3](#_Toc505941252)

[3. RUBRICS 4](#_Toc505941255)

[4. ASSESSMENT PROCESS 5](#_Toc505941256)

[5. RESULTS OF LEARNING GOAL ASSESSMENT – INTRO 6](#_Toc505941257)

[6. RESULTS OF ASSESSMENT: Fall 2016 7](#_Toc505941258)

[7. RESULTS OF ASSESSMENT: Fall 2017 8](#_Toc505941259)

[8. RESULTS OF ASSESSMENT: Fall 2018 9](#_Toc505941259)

[9. OUTCOMES: MFIN LEARNING GOAL # 3 AFTER ROUNDS OF ASSESS…….10](#_Toc505941260)

[10. CLOSE LOOP PROCESS – CONTINUOUS IMPROVEMENT RECORD 1](#_Toc505941261)1

# 1. INTRODUCTION: LEARNING GOAL #3

**Goal:** Students will achieve mastery of the technical and basic quantitative methods required for the Finance domain.

*Objective 1: Students will demonstrate the capability to examine the context of a modeling task and employ commercial-grade financial information tools, such as Bloomberg, and Thomson-Reuters (“the standard financial toolkit”) and efficient techniques to conduct the modeling.*

This goal is assessed in FE 511 Financial Lab: Introduction to Bloomberg and Thomson Reuters – a required course in the MFIN curriculum.

# 2. LEARNING OBJECTIVES AND TRAITS

|  |  |
| --- | --- |
| **MFIN 3:** | **Learning Goal, Objectives and Traits** |
| GOAL | Students will achieve mastery of the technical and basic quantitative methods required for the Finance domain. |
| **Objective 1:** | *Students will demonstrate the capability to examine the context of a modeling task and employ commercial-grade financial information tools, such as Bloomberg, and Thomson-Reuters (“the standard financial toolkit”) and efficient techniques to conduct the modeling.*  |
| **Traits** |   |
| Trait 1: | The student becomes thoroughly familiar with the basic and advanced features and properties of the standards financial toolkit. |
| Trait 2: | The student becomes knowledgeable in querying and analyzing financial databases for investment decisions and can demonstrate the ability to select the appropriate tools to generate financial reports. |
| Trait 3: | The student becomes knowledgeable in constructing financial forecasting models, using the financial databases and programming features of the standard financial toolkit. |

# 3. RUBRICS

|  |
| --- |
|  **MFIN LEARNING GOAL - 3: RUBRIC 1** |
| **MFIN 3** | **Students will achieve mastery of the technical and basic quantitative methods required for the Finance domain.** |
| **Objective 1** | *Students will demonstrate the capability to examine the context of a modeling task and employ commercial-grade financial information tools, such as Bloomberg, and Thomson-Reuters (“the standard financial toolkit”) and efficient techniques to conduct the modeling.* |
|   | **Trait** | **Poor** | **Good** | **Excellent** | **Score** |
|   | **Value** | **0** | **8.5** | **9.5** |  |
| Trait 1: | The student becomes thoroughly familiar with the basic and advanced features and properties of the standards financial toolkit.  | Poor understanding of the elements and capabilities of the standard financial toolkit. | Ability to effectively navigate and operate each of the elements of the standard financial toolkit. | Fluency in navigating and operating each of the elements of the standard financial toolkit, to a level commensurate with current commercial practice. |   |
| Trait 2: | The student becomes knowledgeable in querying and analyzing financial databases for investment decisions and can demonstrate the ability to select the appropriate tools to generate quantitative financial reports.  | Poor understanding of the capabilities of the standard financial toolkit and lack of ability to aggregate information, perform quantitative analysis, and generate quantitative financial reports.  | Ability to use effectively the features of the financial toolkit, moderate skills in aggregating and analyzing financial data, and generating financial reports. | Fluency and efficiency in selecting the best element of the standard financial toolkit for a given task, and to be able to querying, aggregating, analyzing, and generating financial reports to a level commensurate with current commercial practice. |   |
| Trait 3: | The student becomes knowledgeable in constructing financial forecasting models, using the financial databases and programming features of the standard financial toolkit. | Student is not able to construct and debug simple quantitative financial models. | Student can construct simple quantitative financial models, with efficiency and average skill.  | Students can carefully construct financial forecasting models, using the financial databases and programming features of the standard financial toolkit to a level commensurate with current commercial practice. |   |
| **Criterion: Does not meet expectations: 0 – 8.49; Meets: 8.50-9.49; Exceeds: 9.50-10** |

# 4. ASSESSMENT PROCESS

|  |  |  |
| --- | --- | --- |
| **Where & when measured?** | **How measured?** | **Criterion** |
| Assessed in Bloomberg Market Concepts certification exam and Final Project of the required course *FE 511 Financial Lab: Introduction to Bloomberg and Thomson Reuters. A*ssessed in the Fall semester each year. | Description: Relevant exam questions are graded by course owners and aggregated to obtain a total score.Sampling: Students from the MFIN & MBA program are assessed, since this is a joint course. | 85% of students get a grade of GOOD or better as measured by the rubric for this learning goal |

# 5. RESULTS OF LEARNING GOAL ASSESSMENT – INTRO

The results of the initial learning goal assessments carried out to date are included below.

**Explanation**

Each learning goal has a number of learning objectives, and performance on each objective is measured using a rubric that, in turn, contains a number of desired “traits.” Students are scored individually on each trait.

The grading sheets for each student are used to develop a Summary Results Sheet for each learning goal objective. A selection of these summaries is included below.

The first table in the Summary Results Sheet for a learning objective/trait gives the counts of students falling in each of the three categories:

* Does Not Meet Expectations
* Meets Expectations
* Exceeds Expectations

The right-hand column in the table is used to record the average score of the students on each trait. This table provides an indication of the relative performance of students on each trait.

The second table on each sheet provides the counts of students who fall in each of the above three categories for the overall learning objective.

The person doing the assessment provides explanatory comments and recommendations on the bottom of the Results Summary Sheet. The recommendations improve content or pedagogy changes for the next time the course is given.

# 6. RESULTS OF ASSESSMENT: Fall 2016

**LEARNING GOAL #3:
Students will achieve mastery of the technical and basic quantitative methods required for the Finance domain.**

**LEARNING OBJECTIVE #1:***Students will demonstrate the capability to examine the context of a modeling task and employ commercial-grade financial information tools, such as Bloomberg, and Thomson-Reuters (“the standard financial toolkit”) and efficient techniques to conduct the modeling.*

**ASSESSMENT DATE:
ASSESSOR: Dragos Bozdog
NUMBER OF STUDENTS TESTED: 25
COURSE: FE 511**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectations** | **Meets Expectations** | **Exceeds Expectations** | **Average Grade** |
| The student becomes thoroughly familiar with the basic and advanced features and properties of the standards financial toolkit. | 1 | 8 | 16 | 9.51 |
| The student becomes knowledgeable in querying and analyzing financial databases for investment decisions and can demonstrate the ability to select the appropriate tools to generate quantitative financial reports.  | 2 | 12 | 11 | 9.10 |
| The student becomes knowledgeable in constructing financial forecasting models, using the financial databases and programming features of the standard financial toolkit. | 1 | 19 | 5 | 9.21 |
| **Average Grade (Out of 10) =** | **9.27** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Not Meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on average score across all traits)* | **1** | **17** | **7** |

**COMMENTS:** Most of the students were able to meet the expectations or even exceed them. As it can be seen from the results, the students have different levels of achievements in the learning goals. The construction of financial forecasting models and specially programming aspects can be improved.

**REMEDIAL ACTIONS:** There should be an increased focus on the programming features of the standard financial toolkit and more exposure to API programming.

# 7. RESULTS OF ASSESSMENT: Fall 2017

**LEARNING GOAL #3:
Students will achieve mastery of the technical and basic quantitative methods required for the Finance domain.**

**LEARNING OBJECTIVE #1:***Students will demonstrate the capability to examine the context of a modeling task and employ commercial-grade financial information tools, such as Bloomberg, and Thomson-Reuters (“the standard financial toolkit”) and efficient techniques to conduct the modeling.*

**ASSESSMENT DATE:
ASSESSOR: Dragos Bozdog
NUMBER OF STUDENTS TESTED: 12
COURSE: FE 511**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectations** | **Meets Expectations** | **Exceeds Expectations** | **Average Grade** |
| The student becomes thoroughly familiar with the basic and advanced features and properties of the standards financial toolkit. | 0 | 4 | 8 | 9.58 |
| The student becomes knowledgeable in querying and analyzing financial databases for investment decisions and can demonstrate the ability to select the appropriate tools to generate quantitative financial reports.  | 0 | 0 | 12 | 10.00 |
| The student becomes knowledgeable in constructing financial forecasting models, using the financial databases and programming features of the standard financial toolkit. | 0 | 6 | 6 | 9.51 |
| **Average Grade (Out of 10) =** | **9.70** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Not Meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on average score across all traits)* | **0** | **2** | **10** |

**COMMENTS:** All of the students were able to meet the expectations or even exceed them.

**REMEDIAL ACTIONS:** Revise the assessment of the students for Trait 2 such that it measures effectively the knowledge gained by the students.

# 8. RESULTS OF ASSESSMENT: Fall 2018

**LEARNING GOAL #3:
Students will achieve mastery of the technical and basic quantitative methods required for the Finance domain.**

**LEARNING OBJECTIVE #1:***Students will demonstrate the capability to examine the context of a modeling task and employ commercial-grade financial information tools, such as Bloomberg, and Thomson-Reuters (“the standard financial toolkit”) and efficient techniques to conduct the modeling.*

**ASSESSMENT DATE:
ASSESSOR: Dragos Bozdog
NUMBER OF STUDENTS TESTED: 4
COURSE: FE 511**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectations** | **Meets Expectations** | **Exceeds Expectations** | **Average Grade** |
| The student becomes thoroughly familiar with the basic and advanced features and properties of the standards financial toolkit. | 0 | 1 | 3 | 9.62 |
| The student becomes knowledgeable in querying and analyzing financial databases for investment decisions and can demonstrate the ability to select the appropriate tools to generate quantitative financial reports.  | 0 | 0 | 4 | 10.00 |
| The student becomes knowledgeable in constructing financial forecasting models, using the financial databases and programming features of the standard financial toolkit. | 0 | 2 | 2 | 9.52 |
| **Average Grade (Out of 10) =** | **9.71** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Not Meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on average score across all traits)* | **0** | **1** | **3** |

**COMMENTS:** All of the students were able to meet the expectations or even exceed them.

**REMEDIAL ACTIONS:** No remedial action needed at this time.

# 9. OUTCOMES: MFIN LEARNING GOAL # 3 AFTER ROUNDS OF ASSESSMENT

Comments:

The following table shows the average scores on each goal objective for the last 2 years.

|  |  |
| --- | --- |
|  | Objective 1 |
| Fall 2016 | 9.27 |
| Fall 2017 | 9.70 |
| Fall 2018 | 9.71 |
|  |  |

# 9. CLOSE LOOP PROCESS – CONTINUOUS IMPROVEMENT RECORD

**Assurance of Learning**

**Assessment/Outcome Analysis**

**Close Loop Process - Continuous Improvement Record**

**Program:** Master in Finance

**Goal 3:** **Students will achieve mastery of the technical and basic quantitative methods required for the Finance domain.**

**Goal Owner:** Dragos Bozdog

**Where Measured:** Bloomberg Market Concepts certification exam and Final Project in the required course. **FE 511 Financial Lab: Introduction to Bloomberg and Thomson Reuters**.

**How Measured:** Relevant exam and project report are required by course owner and the results are aggregated to obtain a total score.

**Closing the Loop: Actions taken on specific objectives**

|  |  |
| --- | --- |
| **Objective 1** | *Students will demonstrate the capability to examine the context of a modeling task and employ commercial-grade financial information tools, such as Bloomberg, and Thomson-Reuters (“the standard financial toolkit”) and efficient techniques to conduct the modeling.* |
| **When Assessed:** | *Fall 2016* |
| **Remedial Action** | *Increase the focus on API programming and provide additional assignments such that the students get more exposure to the implementation of algorithms and financial forecasting models.* |
| **Outcome from previous assessment:** |  |
| **When Assessed:** | *Fall 2017* |
| **Remedial Action** | *Revise the assessment of the students for Trait 2 such that it measures effectively the knowledge gained by the students.* |
| **Outcome from previous assessment:** | *Improvement of the overall performance of the students.* |
| **When Assessed:** | *Fall 2018* |
| **Remedial Action** | *No remedial action needed at this time.* |
| **Outcome from previous assessment:** | *Students have similar overall performance* |