# Program Plan and Findings: Four Column Layout



# Program (SSB) - FIN - Quantitative Financial Economics (MS) - 431

**Program Mission Statement:** Preparing students for successful professional careers in quantitative financial occupations is the mission of the Masters of Science in Quantitative Financial Economics Program. The MSQFE Program is a unique interdisciplinary environment recognized externally for the quality of our graduates and curriculum.

## **Program Information**

### 2019 - 2020

Program Information Assessment Coordinator's Name: Louis R Piccotti Assessment Coordinator's E-mail Address: louis.r.piccotti@okstate.edu Number of Students Enrolled in the Program: 16 Total Number of Students Graduated: 5 Were university assessment funds used by the department/program for assessment activities?: No If yes, describe how funds were used and the contribution the funds had on the assessment process: na Number of Student Graduates from Stillwater Campus: 5 Number of Student Graduates from Tulsa Campus: 0

## Annual Executive Summaries

## 2019 - 2020

Program Assessment Coordinator:

Plan Review and Approval

Date Current Plan Was Reviewed and Approved: 08/10/2020

Date of Future Plan Review and Approval:

#### **Summary of Assessment Findings**

**Describe overall assessment findings and faculty members' interpretation of the assessment results:** MSQFE students develop superior problem solving skills. They need to further develop their abilities to organize and deliver effective presentations.

#### **Dissemination of Findings**

Describe the individual(s) or committee responsible for reviewing and interpreting assessment data: A subsample of the MSQFE professors. Louis Piccotti; Brian Roseman; Emma Wang

Describe the process for sharing and discussing assessment findings with program faculty: The MSQFE Program Director will present the results of this Assessment report

to the MSQFE Program Committee and members of the Department of Finance.

#### **Program Improvements Based on Assessment**

Based on data collected this year, what changes are being considered or planned for the program?: na Based on this year's findings, what (if any) changes are planned for the assessment process?: na Describe the process for implementing these changes/planned program improvements: na Program Improvements Made in the Last Year: Course Improvements, Curriculum Improvements, Increased Rigor "Other" Improvements: Goals for the Coming Year: Increase computer programming applications in Python

Is this Summary Report Complete?: Yes

List all individuals associated with this report preparation:  $\mbox{Louis R}\xspace{\mbox{Piccotti}}$ 

Outcomes	Assessment Methods	Findings	Use of Findings (Actions)
<ul> <li>Problem Solving - 1. Understanding of the problem - Demonstrates full grasp of concepts and relationships between concepts; identifies all the important elements of the problem.</li> <li>2. Use of terms and symbols - Clear, concise communication of ideas; Thoughts thoroughly explained with the correct terminology and clearly displayed with appropriate symbols; Demonstrates superior knowledge of the language of finance.</li> <li>3. Context - Clearly demonstrates how the solution relates to relevant features of the broader context</li> <li>4. Solution - Represented with detail through logical sequence and systematic progression; Reflects excellent problem-solving skills; Presents strong supporting arguments; Use of relevant outside information; Results are represented graphically in clear and illuminating way.</li> <li>5. Summary - Complete response</li> </ul>	Members of the Department assessment committee were asked to evaluate each written artifact against the Problem Solving rubric. The committee member's evaluations were recorded in a spreadsheet and returned to the Program Director. * Learning Outcome Goal/Benchmark: Timeline for Assessment: Every other year Other Assessment Type:	Reporting Period: 2019 - 2020 Conclusion: 3 - Meets Program Expectations (Proficient) Meets expectations (08/10/2020) Number of Students Assessed: 5 Number of Successful Students: 5 How were students selected to participate in the assessment of this outcome?: randomly What do the findings suggest about student achievement of this learning outcome?: Meets expectations	Use of Findings (Actions): We would like to improve students' competency in mapping the finance theory into practice with better computer programming skills. (08/10/2020)

5. Summary - Complete response with a clear, unambiguous, accurate explanation.

Outcome Status: Active Planned Assessment Year: 2016 -2017, 2017 - 2018, 2019 - 2020

Outcomes	Assessment Methods	Findings	Use of Findings (Actions)
Start Date: Archived Date: Outcome Type: Skills Reason for Archival:			
Written Communication - 1. Conventional Form - Writing is essentially error-free in its mechanics. Its format is well adapted to the assignment and leads the reader to the writer's conclusions. 2. Clarity and Coherence - The writing flows smoothly from idea to idea. The writer has taken pains to help the reader follow the logic of the ideas presented. 3. Focus, Organization, Content - Choices related to focus; organization and/or content make the piece a pleasure to read. Outcome Status: Active Planned Assessment Year: 2018 - 2019, 2019 - 2020 Start Date: Archived Date: Outcome Type: Skills Reason for Archival:			

Conceptualization-key issues and subsidiary embedded, or implicit aspects of a question are identified and clearly stated. 2. Application - Inferences of cause

and effect are stated and potential consequences are addressed. Facts and opinions are stated and clearly distinguished for acknowledgement of value judgments.

3. Analysis - Implications and consequences of the conclusion are considered in context, relative to

Outcomes	Assessment Methods	Findings	Use of Findings (Actions)
assumptions, and supporting			
evidence. The student provides			
reflective thought with regards to the			
assertions.			
4. Evaluation - The key assumption			
that underlies the issue is clearly			
stated and the validity of the			
assumption that underlies the issue is			
assessed.Key data and background			
information is evaluated for validity			
and used in a way consistent with this			
evaluation.			
5. Synthesis - Problem/issue is			
addressed within correct context. The			
analysis, outcomes and conclusions			
are appropriately stated with			
reference to broader discipline			
specific body of knowledge.			
Outcome Status: Active			
Planned Assessment Year: 2018 -			
2019, 2019 - 2020 Start Date:			
Start Date: Archived Date:			
Outcome Type: Skills			
Reason for Archival:			
Quantitative Finance Content -	Analysis of Written Artifacts - The	Reporting Period: 2019 - 2020	
Objectives - Quantitative Finance	student artifacts, rubric and	<b>Conclusion:</b> 3 - Meets Program Expectations (Proficient)	
Content	instructions were provided to the	Quantitative Financial Content: Characteristics and score;	

1. Understanding of the concept -Displays full understanding of concept, relevant strengths and weaknesses. Identifies all important elements of the concept within the context.

2. Integration of concept within specific context - Successfully integrated concept with necessary methods/decision structures.
3. Effective communication -Interpretation and communication of concept clearly reflect appropriate

Analysis of Written Artifacts - The student artifacts,rubric and instructions were provided to the Department of Finance Assessment Committee. Each member of the Assessment Committee evaluated each artifact.

\* Learning Outcome

**Goal/Benchmark:** That each characteristic of the learning objective receive as score of 80% when all Assessment Committee member evaluations were considered in aggregate. Conclusion: 3 - Meets Program Expectations (Proficient) Quantitative Financial Content: Characteristics and score; Understanding 96%, Terms & Symbols 96%, Calculations 93%, Solution 96%, Summary 93% Total 95% (08/10/2020) Number of Students Assessed: 5 Number of Students selected to participate in the assessment of this outcome?: randomly What do the findings suggest about student achievement of this learning outcome?: randomly

**Timeline for Assessment:** 

Outcomes	Assessment Methods	Findings	Use of Findings (Actions)
detail . Presents strong supporting arguments; Use of relevant outside information; Concept is represented in clear and illuminating way Outcome Status: Active Planned Assessment Year: 2019 - 2020 Start Date: Archived Date: Outcome Type: Knowledge Reason for Archival:	Other Assessment Type:		