



Dillard College of Business Administration

Syllabus: Independent Study in Economics – SAS Certification Preparation

ECON 4553, Section 101

Fall Semester 2020

Wednesday 7:00 pm – 8:30 pm

CONTACT INFORMATION:

INSTRUCTOR: Dr. John E. Martinez
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OFFICE HOURS: 3:30 am to 4:30 pm Tuesday and Thursday via D2L
2:00 pm to 3:30 pm Monday and Wednesday via D2L,
or by appointment.

ZOOM Link:

<https://msutexas-edu.zoom.us/j/94299836741>

SYLLABUS CHANGE POLICY:

This syllabus is a guide for the course and is subject to change. All changes will be announced in class and students will be responsible for incorporating the changes into the syllabus. If, at some point, the university switches to an online format, there will be significant changes in the way future exams are administered. In that case, it will be necessary for students to have access to a webcam. Any exam taken online will be monitored through RESPONDUS.

COURSE MATERIALS:

SAS® Certification Prep Guide: Base Programming for SAS®9, Third Edition

Copyright © 2011, SAS Institute Inc., Cary, NC, USA ISBN 978-1-60764-924-3

Other Requirements: Access to SAS windowing environment.

COURSE DESCRIPTION:

The course is a test preparation document that uses the following environments and products:

- SAS Certification Prep Guide: Base Programming for SAS®9
- SAS windowing environment

OBJECTIVES: To Prepare for Certification in SAS Base Programming for SAS ®9

LEARNING GOALS:

General Learning Goals:

Upon successful completion of this course, the student should have a fundamental understanding of SAS Base Programming

Course Specific Learning Goals:

Learn how to import data, create and modify SAS data sets
 Learn how to identify and correct data syntax and programming logic errors.
 Learn to Produce Descriptive Statistics and Create Reports
 Learn to use Functions to Manipulate Data

Assessment:

Quizzes found in the Prep Guide will be used to assess attainment of learning goals.

COURSE POLICIES:**A. Attendance Policy:**

Students are expected to attend all class meetings for this course.

B. Other Related Policies**GRADING and EVALUATIONS:**

A student's grade will be based on one of the following:

<i>Grade Breakdown</i>	<i>%</i>	<i>Points</i>
Chapter Quizzes	100%	100

GRADE EVALUATION:

Quizzes: The Prep Guide has a multiple choice quiz at the end of each chapter. A form for answers will be distributed to students for each chapter quiz. The answers should then be emailed to instructor. Each quiz may be taken three times with each chapter quiz grade based on the top two scores. Of the 16 quizzes provided in the text, students are responsible for taking 12 of those quizzes. Your grade will be determined as a percent of questions answered correctly: A (Above 90%), B (80-89), C (70-79), D (60-69), F (below 60).

Requirements and Details**Exam Objectives and Updates to This Book**

The current exam objectives and a list of any updates to this book are available at www.sas.com/certify. Exam objectives are subject to change.

Registering for the Exam

It is the student's responsibility to register for the SAS Base Programming SAS®9 exam. See the SAS Global Certification website at www.sas.com/certify.

**Contents - How to Prepare for the SAS Base Programming for SAS®9 Exam
 Accessibility Features of the SAS Certification Prep Guide**

Introduction**Week 1 Aug 26****Chapter 1 • Setting Up Practice Data****Week 2 Sep 2**

Accessing Your Practice Data

Chapter 2 • Basic Concepts

Getting Started

The Basics of the SAS Language

SAS Libraries

Referencing SAS Files

SAS Data Sets

Chapter Quiz

Week 3 Sep 9

Chapter 3 • Accessing Your Data

SAS Libraries

Viewing SAS Libraries

Chapter Quiz

Week 3 Sep 9

Chapter 4 • Creating SAS Data Sets

Referencing an External Data File

The IMPORT Procedure

Reading and Verifying Data

Using the Imported Data in a DATA Step

Reading a Single SAS Data Set to Create Another

Reading Microsoft Excel Data with the XLSX Engine

Creating Excel Worksheets

Writing Observations Explicitly

Chapter Quiz

Week 4 Sep 16

Chapter 5 • Identifying and Correcting SAS Language Errors

Error Messages

Correcting Common Errors

Chapter Quiz

Week 5 Sep 23

Chapter 6 • Creating Reports

Creating a Basic Report

Selecting Variables

Identifying Observations

Sorting Data

Generating Column Totals

Specifying Titles and Footnotes in Procedure Output

Assigning Descriptive Labels

Using Permanently Assigned Labels

Chapter Quiz

Week 6 Sep 30

Chapter 7 • Understanding DATA Step Processing

How SAS Processes Programs

Compilation Phase

Execution Phase

Debugging a DATA Step

Testing Your Programs

Chapter Quiz

Week 7 Oct 7

Chapter 8 • BY-Group Processing

Definitions

Preprocessing Data

FIRST. and LAST. DATA Step Variables

Chapter Quiz

Week 8 Oct 14

Chapter 9 • Creating and Managing Variables

Creating Variables

Modifying Variables

Specifying Lengths for Variables

Subsetting Data

Chapter Quiz

Week 9 Oct 21

Chapter 10 • Combining SAS Data Sets

How to Prepare Your Data Sets

Methods of Combining SAS Data Sets: The Basics

One-to-One Reading: Details

Concatenating: Details

Match-Merging: Details

Match-Merge Processing

Renaming Variables

Excluding Unmatched Observations

Chapter Quiz

Week 10 Oct 28

Chapter 11 • Processing Data with DO Loops

The Basics of DO Loops

Constructing DO Loops

Nesting DO Loops

Iteratively Processing Observations from a Data Set

Conditionally Executing DO Loops

Chapter Quiz

Week 11 Nov 4

Chapter 12 • SAS Formats and Informats

Applying SAS Formats and Informats

The FORMAT Procedure

Defining a Unique Format

Associating User-Defined Formats with Variables

Chapter Quiz

Week 12 Nov 11

Chapter 13 • SAS Date, Time, and Datetime Values

SAS Date and Time Values

Reading Dates and Times with Informats

Example: Using Dates and Times in Calculations

Displaying Date and Time Values with Formats

Chapter Quiz

Week 13 Nov 18

Thanksgiving Break Nov 25

Chapter 14 • Using Functions to Manipulate Data

The Basics of SAS Functions

SAS Functions Syntax

Converting Data with Functions

Manipulating SAS Date Values with Functions
Modifying Character Values with Functions
Modifying Numeric Values with Functions
Nesting SAS Functions

Chapter Quiz

Week 14 Dec 2

Chapter 15 • Producing Descriptive Statistics

The MEANS Procedure
The FREQ Procedure

Chapter Quiz

Week 15 Dec 9

Chapter 16 • Creating Output

The Output Delivery System (ODS)
Creating HTML Output with ODS
Creating PDF Output with ODS
Creating RTF Output with ODS
Creating EXCEL Output with ODS

Chapter Quiz

Week 15 Dec 9