

# DSCI 612: Programming with SAS Base for Data Science

CRN 39826

*Online through Coursera*

## Instructor Information

**Primary Instructor:** Dr. Drew Lazar

**Office:** RB 434

**Phone:** 765-285-8672

**Email:** [dmlazar@bsu.edu](mailto:dmlazar@bsu.edu)

## Course Materials and Prerequisites

**Textbook:** SAS Certified Specialist Prep Guide, Base Programming Using SAS 9.4, SAS Institute Inc., 2019. ISBN 978-1-64295-179-0 (Hard Copy).

**Prerequisites:** None

## Course Objectives

The overall objective of this course is to introduce SAS Base 9 to graduate data science students. After completion of this course, students should be able to:

1. Access and create SAS data structures using SAS procedures and the data step.
2. Manage SAS data by implementing basic to intermediate programming techniques.
3. Use SAS 9 procedures and libraries to produce descriptive statistics, graphs and reports.
4. Design basic SAS statistical models for quantitative and qualitative prediction and data analysis.
5. Pass the SAS Certified Base Programmer for SAS 9 certification exam.

## Course Content

We will cover all the chapters in the textbook with an emphasis on subjects that might be on the certification exam. There will also be a section on regression and decision trees in SAS.

## Reading

You will be given reading assignments from our SAS textbook that correspond with material that is covered in the PowerPoint slides and videos.

## Lesson Quizzes

There will be untimed, automatically graded quizzes which will correspond to chapters from the textbook and subjects covered in the class. You should take approximately two lesson quizzes a week.

## Module Final Assessments and Coding Exercises

There will be six timed final assessments. These are timed and you get one attempt. There are also graded coding exercises at the end of each of the six modules covered in class.

## Tips for Success in This Class

1. Read the chapters and go through the course slides prior to watching each video.
2. Ask for help when needed.
3. Watch the videos carefully and code along with each of the examples.
4. Study and review the quizzes and coding exercises to get ready for the certification exam.

## Final Grade

Your grade will be determined as follows:

Task	Percent of Final Grade
Lesson Quizzes	37.5%
Final Module Assessments	25%
Coding Exercises	37.5%
Total	100%

Letter grades are assigned according to the following scale:

Percent Range	Letter Grade
92 and above	A
90 to less than 92	A-
87 to less than 90	B+
83 to less than 87	B
80 to less than 83	B-
75 to less than 80	C+
72 to less than 75	C
70 to less than 72	C-
67 to less than 70	D+
65 to less than 67	D
62 to less than 65	D-
Less than 62	E

## SAS Professional Exam

Students are encouraged to take the SAS 9.4 Base Programming Performance Based Exam. The exam is offered at Pearson testing centers and in a proctored, online setting. Information about the exam is provided on our Coursera website.

You will receive an A in the course if all three of the following criteria are met:

1. You pass the SAS 9.4 Base Programming Performance Exam and provide me with an authorized score report with a registration number and your photo by the last day of class.
2. You have completed all module quizzes, assessments, and coding exercises excluding those in modules 6.2 and 6.3.
3. You have at least an 83 percent average on the quizzes, assessments, and coding exercises that you have taken.

You do not need to take the SAS 9.4 Base Programming Performance Exam, however. If you do not take it, your grade will be based on your quiz scores, module assessments, and coding exercises as indicated above.

## Academic Honesty

Ball State's Academic Ethics Policy is available on the [Ball State Academic Integrity webpage](#). Penalties for violating this policy can lead to disciplinary action up to and including expulsion from the university.

## Course Withdrawal

The course withdrawal period ends [VERIFY DATE FOR CURRENT SEMESTER]. Before this date, students can elect to receive a "W" for the course by completing and submitting the proper form. The instructor's permission is not required. For details, see the [Ball State withdrawal procedures page](#), as well as Degree Requirements and Time Limits in the current Undergraduate Catalog or Withdrawal Procedures in the current graduate catalog.

## Diversity Statement

Ball State University aspires to be a university that attracts and retains a diverse faculty, staff, and student body. We are committed to ensuring that all members of the community are welcome, through valuing the various experiences and worldviews represented at Ball State and among those we serve. We promote a culture of respect and civil discourse as expressed in our Beneficence Pledge and through university resources found at the [Ball State Multicultural Center](#).

## Disability Statement

If you need course adaptations or accommodations because of a disability, please contact me as soon as possible. Ball State's Disability Services office coordinates services for students with disabilities; documentation of a disability needs to be on file in that office before any accommodations can be provided. Disability Services can be reached at 765-285-5293 or [dsd@bsu.edu](mailto:dsd@bsu.edu).