



Dr. Tom R. Bohannon is an analytical consultant for SAS Institute specializing in applying analytical methods to business problems in industry and higher education. After retiring from Baylor University in 2007 he served also as a visiting professor in the statistics department at Texas A&M University. Before retiring from Baylor University in April of 2007, Bohannon was Director and Assistant Vice President for the Office of Institutional Research and Testing for twenty years.



F. Michael Speed Ph.D. is an Analytical Consultant at SAS. He retired from Texas A&M University in August 2012. His teaching and research interests are in applying statistics to real-world problems using SAS. As part of the Global Academic Program at SAS, Speed teaches classes for faculty and students and conducts research in linear models, generalized linear models, nonlinear mixed models, and data mining.

## Agenda

- 1 **January 20:**  
**Workshop-1: SAS University Edition (Day1)**
- 2 **January 21:**  
**Workshop-2: SAS Visual Analytics (Day2)**
- 3 **January 22:**  
**Workshop-3: SAS Visual Statistics (Day3)**
- 4 **January 20-21:**  
**Workshop-4: Predictive Modeling Using Enterprise Miner (Day1 & Day2)**

# Center for Faculty Development AND Information Systems Department

Gordon Ford College of Business

Invite you to attend 2015 SAS Workshops for Faculty @ WKU

2015 Workshops for Professors



## Are you interested in analytics?

As the market demand for professionals with data management, analytical and problem-solving skills increases, WKU in collaboration with SAS seeks to provide university students with an analytical toolset that enables them to address modern, data-intensive business problems.

- ◆ To accomplish this goal, SAS is holding workshops at WKU for faculty who wish to bring the power of analytics to the classroom.
- ◆ These workshops are free to all participants.
- ◆ Workshop participants will receive free materials, including PowerPoint slides, instructor notes, and data sets that may be used for self-study or classroom instruction.
- ◆ The topics covered in these workshops are designed to be taught in courses at the undergraduate and graduate level.
- ◆ Please register for these workshops, please visit [www.wku.edu/pdevents](http://www.wku.edu/pdevents) (note: workshops will be limited to 25 participants each).

## Predictive Modeling Using Enterprise Miner (2 days)

This workshop covers the skills required to assemble analysis flow diagrams using the rich tool set of SAS Enterprise Miner for predictive modeling (decision tree, regression, and neural network models). The workshop will cover the following:

- ◆ Define a SAS Enterprise Miner project and explore data graphically
- ◆ Modify data for better analysis results
- ◆ Build and understand predictive models such as decision trees and regression models
- ◆ Compare and explain complex models
- ◆ Generate and use score code
- ◆ Illustrate this concepts using examples from marketing.

## Visual Analytics (1 day)

The workshop uses SAS Visual Analytics to show how you can explore relevant data quickly and easily. Using SAS Visual Analytics can look at more options, uncover hidden opportunities, identify key relationships and make more precise decisions faster than ever before.

- ◆ Self-service, ad hoc visual data discovery and exploration put lightning-fast insights within everyone's reach. Whether you're a business user with limited technical skills, a statistician or a data scientist, powerful analytics are at your fingertips. Absolutely no coding required.
- ◆ Sophisticated analytics, including decision trees, on-the-fly forecasting and scenario analysis, have been seamlessly integrated with ease-of-use features such as auto charting, "what does it mean" pop-ups, and drag-and-drop capabilities. Anyone can understand and benefit from complex data.

## Visual Statistics (1 day)

This workshop will cover the topics below using SAS Visual Statistics:

- ◆ **Data visualization and exploration:** Quickly identify predictive drivers among thousands of explanatory variables, and

interactively discover outliers and data discrepancies through integration with SAS Visual Analytics.

- ◆ **Descriptive modeling:** Visually explore and evaluate segments for further analysis using k-means clustering.
- ◆ **Predictive modeling:** Build predictive models using techniques like linear regression, generalized linear modeling, logistic regression and classification trees.
- ◆ **In-memory analytical processing:** Build models faster. There's no need to write data to disk or perform data shuffling, and you can instantly see the impact of changes (e.g., adding new variables or removing outliers).
- ◆ **Model comparison and assessment:** Generate model comparisons, including lift charts and ROC charts for one or more models.
- ◆ **Model scoring:** Generate SAS DATA step code, and apply it to new data.

## SAS University Edition (1 day)

The SAS University Edition is a free virtual image download of SAS products. This one day workshop will show how this free product can be used to learn SAS programming, learn statistics, and get exposure to advanced statistical procedure using a drag and drop interface.

- ◆ An intuitive interface that lets you interact with the software from your PC, Mac or Linux workstation.
- ◆ A powerful programming language that's easy to learn, easy to use. Learn more about Base SAS.
- ◆ Comprehensive, reliable tools that include state-of-the-art statistical methods. Learn more about SAS/STAT.
- ◆ A robust, yet flexible matrix programming language for more in-depth, specialized analysis and exploration. Learn more about SAS/IML.
- ◆ Out-of-the-box access to PC file formats for a simplified approach to accessing data. Learn more about SAS/ACCESS.