

# Marshall University Syllabus College of Science Department of Mathematics and Statistics

#### Course

STA 464 Statistical Computing

## **Course Description**

Introduction to the commonly used statistical computing techniques, procedures and methods, with extensive use of R language and environment.

#### **Credits**

3 credits

#### **Prerequisites**

STA 445

#### Term/Year

Fall 2018

## **Meeting Days/Times**

Class will meet in SH 335 on MWF from 12:00 till 12:50 pm.

This course should be completed in one fall term.

#### **Academic Calendar**

For beginning, ending, and add/drop dates, see the <u>Marshall University Academic Calendar</u> (URL: http://www.marshall.edu/academic-calendar/).

#### **Instructor**

Alaa Elkadry

#### **Contact Information**

Office: WAEC 3231

• Office Hours: MW 2:00-4:00 pm and 5:00-6:00 pm also by appointment, in person or online.

Office Phone: (304)696-3047

• Marshall Email: <a href="mailto:elkadry@marshall.edu">elkadry@marshall.edu</a>

# Required and/or Recommended Texts and Materials

## **Required Texts and Materials**

No textbook is required. We will be using some references that will be mentioned in class

# **Technology Assistance**

If you have technical problems, please contact one or more of the following:

- <u>Blackboard Support Center</u> (URL: http://marshall.edusupportcenter.com)
- Marshall <u>Information Technology (IT) Service Desk</u> (Help Desk) (URL: http://www.marshall.edu/it/departments/it-service-desk/)
  - o Huntington: (304) 696-3200
  - o South Charleston: (304) 746-1969
  - <u>Email the IT Service Desk</u> (itservicedesk@marshall.edu)

# **Course Purpose**

Make students familiar with modern methodologies and issues associated with computational Statistics.

# **Course Objectives**

The student will be able to:

- Use R to implement newly developed statistical methods.
- Use simulation to evaluate statistical studies

#### **Desired Learner Outcomes**

The table below shows the following relationships: How each student learning outcome will be practiced and assessed in the course.

Course student learning outcomes	How students will practice each outcome in this course	How student achievement of each outcome will be assessed in this course
Students will be more familiar with R programming	Class work	HW and project
Students will use R and knowledge to evaluate statistical studies	Class Activities	project
Students will be more familiar with Latex	Class Activities	HW

# **Course Requirements/Due Dates**

Homework will be assigned approximately every 2 weeks. Due Dates will be announced during class. Late submissions won't be accepted.

For each HW you are required to submit a report written using LATEX.

## **Course Policies**

By enrolling in this course, you agree to the following course policies.

# **Attendance/Participation Policy**

You must attend class virtually using Blackboard Collaborate. Attendance is a key to success in this class. It's your responsibility to ask about any material or announcements missed because of any absence.

# **Grading Policy**

## **Grading Scale**

Homework 50% (the HW with the lowest grade will be dropped) Project 50%

# **University Policies**

By enrolling in this course, you agree to the University Policies. Please read the full text of each policy (listed below) by going to <u>MU Academic Affairs: University Policies</u>. (URL: http://www.marshall.edu/academic-affairs/policies/)

- Academic Dishonesty Policy
- Academic Dismissal Policy
- Academic Forgiveness Policy
- Academic Probation and Suspension Policy
- Affirmative Action Policy
- Dead Week Policy
- D/F Repeat Rule
- Excused Absence Policy for Undergraduates
- Inclement Weather Policy
- Sexual Harassment Policy
- Students with Disabilities (Policies and Procedures)
- University Computing Services Acceptable Use Policy

#### **Students with Disabilities**

For University policies and the procedures for obtaining services, please go to <u>MU</u>
<u>Academic Affairs: University Policies</u> and read the section, **Students with Disabilities**. (URL: http://www.marshall.edu/academic-affairs/policies/)

## **Marshall University E-Mail Accounts**

You must have and use your MU email account. Your personal email accounts will not be used for official communication with Marshall University programs and personnel. You may redirect your MU email to your own personal email account, but you must sign in to your MU account to do that. Marshall University uses Office 365 email. For more information, visit Marshall IT: Office 365 (URL https://www.marshall.edu/it/office365/).