### **Marshall University**

### MTH 225 – SEC 102: Introductory Statistics CRN 3068 – Fall 2015

Class Time: MWF 11:00 – 11:50 am Location: Smith Hall 509 (Tentative Syllabus)

INSTRUCTOR: Dr. Raid Al-Aqtash OFFICE: (The Arthur Weisberg Family Applied Engineering Complex) WAEC 3231 OFFICE PHONE: 304-696-3044 E-mail: alaqtash@marshall.edu

OFFICE HOURS: MWF 9:00 – 10:30 am, TR 11:00 am – 12:00 noon, others by appointment.

**UNIVERSITY POLICIES:** By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to <u>www.marshall.edu/academic-affairs</u> and clicking on "Marshall University Policies." Or, you can access the policies directly by going to

http://www.marshall.edu/academic-affairs/policies/

Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment. The most recent revision of the 2015-2016 undergraduate catalog can be obtained at

http://www.marshall.edu/catalog/files/UG\_15-16\_final\_published.pdf

#### Academic Integrity:

- The University Rules, including the Code of Conduct, and other documented policies of the department, college, and university related to academic integrity, will be enforced. Any violation of these regulations will be dealt with on an individual basis according to the severity of the misconduct.
- Please note that any act of *Plagiarism*, *Cheating*, or/and *Academic Dishonesty* will be prosecuted to the maximum extent according to MU catalog.

#### **CLASS RULES:**

- 1. SILENT YOUR PHONES.
- 2. If you need to leave the class early, inform your instructor before the class begins. Please **show your respect** to your classmates and your instructor.
- 3. Good attendance is a major key to success in this (or any) class! Students are expected to attend all scheduled classes.

**COURSE DESCRIPTION**: This course introduces students to basic probability, descriptive statistics, fundamental statistical inference procedures involving estimation and hypothesis testing for a variety of situations with wide applications. **PREREQUISITES**: ACT Math 21 or MTH121 or higher.

**COURSE OBJECTIVES AND STUDENT LEARNING OUTCOMES**: The table below shows the following relationships: How each student learning outcomes will be practiced and assessed in the course:

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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 identify types of data.	Homework	Homework, Quizzes and Exams
Students will organize data using a frequency distribution.	Homework	Homework, Quizzes and Exams
Students will draw and interpret a stem and leaf plot.	Homework	Homework, Quizzes and Exams
Students will summarize data using measures of central tendency.	Homework	Homework, Quizzes and Exams
Students will describe data using measures of variation.	Homework	Homework, Quizzes and Exams
Students will determine the probability of an event and compound events.	Homework	Homework, Quizzes and Exams
Find the conditional probability of an event.	Homework	Homework, Quizzes and Exams

TEXT: Elementary Statistics: A Step by Step Approach, 7<sup>th</sup> Edition, 2015, by Bluman.

#### **REFERENCES:**

- > The Basic Practice of Statistics, by Moore, Notz and Flinger.
- > Statistics, Informed Decisions Using Data, by Michael Sullivan.

**MATERIAL**: We will cover most of the chapters (1 through 10) of the text, with additional topics as time allows.

**CALCULATOR:** Graphing calculator (i.e.TI-83, TI-84, etc.)

#### **GRADED WORK**: (650 points)

1. Exams:

There will be two in-class midterm exams and a final exam. The final exam will be comprehensive. In case of extreme emergency, serious illness, or university related activity, when I have been notified with evidence or approval, or excused absences approved by the Dean of Student Affairs, the student will be allowed to make up the missed exam.

Exam #1: Wednesday, September 30th, 2015	(100 points)	~ 15.4%
Exam #2: Wednesday, November 2 <sup>nd</sup> , 2015	(100 points)	~ 15.4%
Final Exam: <i>Tuesday</i> , <i>December</i> 8 <sup>th</sup> , 2015, 10:15 am – 12:	:15 p.m. (150 points)	~23.1%

#### 2. Quizzes, Classroom Activities, and Homework Assignment: (200 points) ~ 30.8% There will be at least 12 quizzes, activities, or homework assignments TBD. The highest 10 quizzes/homework assignments will count. Quizzes or homework assignments may contain problems that have been assigned as practice problems or are exactly like practice problems.

#### 3. ATTENDANCE

 $(100 \text{ points}) \sim 15.4\%$ 

Good attendance is a major key to success in this (or any) class! Attendance Policy:

Students are expected to attend all scheduled classes. I'll reserve the right to drop 2 points for each absence. It is the student's responsibility to find out what was discussed in a missed class.

In case of an emergency, when I am notified ahead of time, or when the absence is excused by the office of the dean of affairs, a student will be allowed to makeup a missed work.

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Roughly speaking 90% is at least an A , 80% is at least a B, 70% is at least a C, 60% is at least a D. Final grades will be determined by the end of the semester.

**MATH TUTORING SERVICES**: Marshall University provides multiple options for free on-campus tutoring. It is the student's responsibility to take advantage of these facilities in addition to utilizing office hours.

- The Mathematics Department tutoring lab is located in Smith Hall 115 and/or Smith Hall 620 (computer lab). The tutoring hours are:
  - In Smith Music Hall 115: 10:00am to 4:00pm Monday to Thursday, and 10:00am to noon on Friday.
  - In Smith Hall 620: 4:00pm to 6:00pm Monday to Thursday.

The current schedule can be found at <u>www.marshall.edu/math/tutoringlab.asp</u>. Schedules for the new semester are usually posted during the second week of classes.

The University College has a tutoring lab on the first floor of Laidley Hall. Information regarding this facility can be found at <u>www.marshall.edu/wpmu/uc/tutoring-services</u>.

#### DROP: The last day to drop class (no entry to academic record) is August 28<sup>th</sup> 2015.

#### Withdrawals: October 30<sup>th</sup>, 2015 is the last day to withdraw "W" from the class.

The complete academic calendar is available at https://www.marshall.edu/calendar/academic/fall2015.asp

#### Special Needs Policy:

Students with special needs should meet with the instructor as soon as possible to arrange for reasonable provisions to ensure an equitable opportunity to meet all of the requirements of this course. At the discretion of the instructor, some accommodations may require prior approval by H.E.L,P. program (<u>http://www.marshall.edu/help/</u>)

#### Blackboard / Electronic Communications:

Blackboard will be used to post pertinent class information and course documents. For technical problems with Blackboard contact IT Services Desk 304-696-3200.