# **Youngstown State University**

### **Department of Mathematics and Statistics**

Course Outline for Mathematics 2625 (Distance Learning)

Course Title: Mathematical Literacy and Critical Reasoning

Course Credit: 4 s.h.

<u>Text</u>: Elementary Statistics: A Step By Step Approach, by Bluman, 8th edition, McGraw-Hill, 2012.

Course Prereq: Math 1501 or at least Level 3 on the Mathematics Placement Test. Credit will not be given for both MATH 2623 and 2625.

<u>Course Description:</u> This course is an introduction to contemporary mathematics and its applications. Topics include basic scientific methods and a variety of practical problems that can be modeled and solved by quantitative means.

<u>Course Objectives</u>: MATH 2625 is a General Education course. Math 2625 satisfies General Education goal 5 and integrates goals 1, 2, and 3 wherever possible. These general education goals are:

- To write and speak effectively.
- To process and present both quantitative and qualitative information using technology.
- To reason critically both individually and collaboratively.
- Comprehend mathematical concepts in both applied and abstract contexts.

#### Course Assignments

- Elementary Statistics: A Step By Step Approach (Chapters 1 through 11, chapter 9 is optional)
- Computer software such SPSS, EXCEL and MS-WORD may be used in the course.

There will be online homework assignments and <u>two proctored exams at YSU</u> during the semester. Students are responsible to check with the instructor about the time and the place of the exams.

<u>Students with Disabilities</u>: In accordance with University procedure, if you have a documented disability and require accommodations to obtain equal access in this course, please contact the Office of Equal Opportunity and Disability Services at the beginning of the semester or when given an assignment for which an accommodation is required. Students with disabilities must verify their eligibility through the Office of Disability Service at Wick House (330) 941-1372 (Voice), (330) 941-1564 (TDD) intake procedure.

<u>Violation of The Code of Student Rights in Using of Technology</u>: Theft or misuse of information technology (including downloading of pornography or visiting pornographic web sites) is a violation of "The Code of Student Rights, Responsibilities, and Conduct." Violating "The Code" will result in disciplinary action, which may include suspension or expulsion from the University.

Students should start checking their ...@student.ysu.edu email account for emails sent from instructor about class related information the week before the beginning of the semester.

Semester: Spring 2014

Last Day to Withdraw with a grade of "W": Thursday, March 27, 2014

#### **Instructor Information:**

**Instructor:** Dr. Guang-Hwa Andy Chang

**Office:** 623 Lincoln Hall **Phone No.:** (330) 941-1818

E-mail: gchang@ysu.edu or gh.andychang@gmail.com

**Skype Name:** andychangysu (A free Internet phone: **Skype** can be download at <u>www.skype.com</u>)

Webpage: http://people.ysu.edu/~gchang

**Office hours:** 10:00 am to 11:00 am, MWF, 11:30 am – 12:30 pm, TR, or by appointment

# **Grading Policy:**

Blackboard Assignments	300 points
CONNECT Homework	400 points
Two Proctor Exams (on March 6 and May 1)	200 points
Term Paper	100 points
Total	1000 points

<sup>(\*</sup> Some extra credit assignments may be given for bonus points.)

### **Final Grade:**

900 or above	$\Rightarrow$ A
800 - 899	⇒ at least a B
700 - 799	$\Rightarrow$ at least a C
600 - 699	$\Rightarrow$ at least a D
below 600	⇒ at most a D

# Homework, assignments and term project:

- Assignments and exams will be assigned and graded. I recommend that you follow the suggested reading
  schedule and work on the assignments immediately after finishing reading the material from the chapter. Late
  assignment will not be accepted.
- There will be **two proctor exams** during the semester tentatively scheduled at **Lincoln room 414**. **No make-up exams** will be given unless you have a good excuse with supporting documentation. If you could not take the exam at the scheduled time please contact instructor within the first two weeks of the semester to make other arrangement. If you could not attend the proctored exam at YSU, you can also find a proctor and fill out a proctor form to take the exam at the location of your choice. Please contact me during the first two weeks of the semester to start making arrangement for the exams.
- SPSS is the recommended statistical software for this course. SPSS is available in Math Computer Lab in Lincoln Hall and many other computer labs in YSU. You can also get the student version of SPSS software through YSU bookstore or online through OnTheHuh eStore web site. You may use EXCEL or R or other software. SPSS may be used in research methods course later, so be sure to check with your academic advisor before you decide on software use. R is a free software that you can download from Dr. Chang's web site: <a href="http://people.ysu.edu/~gchang/r/R\_Instructions.htm">http://people.ysu.edu/~gchang/r/R\_Instructions.htm</a>. Please have the software ready by the end of the 2nd week of the semester.
- There is a term project paper for the course. Detail information will be announced during the semester.
- Optional class meetings may be arranged **upon request** for learning statistical software or reviewing course materials. If arranged the dates will be announced.

#### **Recommendations:**

- Information related to the course will be sent to your YSU email account. You are responsible to check your email regularly for course related information and announcements.
- You may use Bluman's older editions, please match the subject titles when you read the older textbook.
- Successful students have found that the subject demands frequent intensive study with lots of problem solving exercises. If you have questions, please contact instructor immediately. Do not wait till last minute.
- MAC center, located at Lincoln Hall, provides free tutoring service for this course. Feel free to use this
  facility.
- A scientific hand calculator that has the *mean* and *standard deviation* functions maybe helpful.