**Introduction to Probability, Statistics and Data Handling** module amounts to 56 contact hours divided (basically) into:

28 - lecture hours;

22 - problem solving (PS) classes;

6 - computer exercises (**CE** - using Excel for solving statistical problems)

Accordingly with the University Study Regulations <a href="https://international.agh.edu.pl/#pq=1232i&str=307">https://international.agh.edu.pl/#pq=1232i&str=307</a>

presence of students **is compulsory** in the case of the PS and CE classes. This means simply that:

- 1) any absence at PS/EC should be carefully justified;
- 2) the teacher **must** formulate extra conditions demanding some extra work the student must accomplish in order to make up for her/his absence(s)

As in our case we will be working in a flexible manner, interchanging courses (lectures) and problem solving classes the **rule #1 is:** 

Students willing to receive a positive grade must be present at least (!) at 50% of all meetings (28 hours – hopefully)

Computer Exercises (CE) – there will be THREE meetings (at the end of the semester). Student present actively at all meetings receives the grade 4 (good) without any extra work (project); present at 2 meetings – 3.5 (better than satisfactory); present at one meeting –3 (satisfactory). These grades may be easily improved be executing a simple project (ask teacher). Student absent at all three meetings must execute at least one simple project.

**Problem Solving Classes (PS)** – there will be (hopefully) 11 meetings but two of them will be used for writing two tests ( $1^{st}$  – around  $15^{th}$  April;  $2^{nd}$  – around  $5^{th}$  June 2016).

The assessment grade of **PS** is basically a straight mean of the grades of the two tests; the resulting grade may be improved (by up to 1 point) in case of the students participating **actively in the classes.** 

## EXAM (E)

is a collection of few (!) simple (!!) and basic (!!!) questions. The examples of such questions (topics) are listed <u>here</u>.

## Final Grade (FG)

Once the grades (CE grade, PS grade and E grade) are calculated the final grade is calculated as a weighted mean:

$$FG = 0.15*CE + 0.60*PS + 0.25*E$$

To be positive it must be higher than 2.67.

In case of a negative result (or absence at) of any of two PS tests you will have an extra possibility to repeat such a test; the same in the case of a failure at the exam. Here the number of make-up exams is even greater – two.

## Suggested References:

- 1. Walter A. Rosenkrantz "Introduction to Probability and Statistics for Scientists and Engineers", McGraw-Hill Inc., 1997 (available in the UST AGH Main Library)
- 2. <a href="http://www.statsref.com/">http://www.statsref.com/</a> A free web-based statistics resource Created and managed by Dr Michael J de Smith, University College London
- **3.** <a href="http://www.bmj.com/about-bmj/resources-readers/publications/statistics-square-one">http://www.bmj.com/about-bmj/resources-readers/publications/statistics-square-one</a> (a very readable page essentially dedicated to medical uses of statistics)