INTERAMERICAN UNIVERSITY OF PUERTO RICO
METROPOLITAN CAMPUS
ECONOMICS & BUSINESS ADMINISTRATION
SCHOOL OF ECONOMICS

COURSE SYLLABUS

I. **Course Title**: Basic Statistics (MAEC 2221)
   Credit Hours: Three (3)
   Prerequisites: GEMA 1200
   Term: _________________________________
   Professor: _________________________________
   Office Hours: _________________________________
   Office Telephone: _________________________________
   E-mail: _________________________________

II. **Course Description**:  

   Emphasis on the descriptive aspects of statistical analysis. Collection, organization and presentation of statistical data. Frequency distribution. Measures of central tendency, skewness, kurtosis and dispersion. The normal curve and tables. Prerequisite: GEMA 1200

III. **Courses Contents**:  

   1. Introduce the student to statistical analysis and the role it plays in today's decision making process.
   2. Provide the student with basic understanding of the principles of descriptive statistics, both mechanical and conceptually.
   3. Identify areas of applications of interest to the student. (business and economic applications)
   4. Provide the student the necessary background for inferential statistics.

IV. **Course Contents**:  

   1. Introduction to statistical methods and its applications to business subjects.
   2. Organizing and summarizing data:
      a. Basic vocabulary necessary for understanding statistics. Types of data. Levels of measurement.
      b. Collection and sources of data
      c. Ungrouped data versus group data
      d. Construction and use of frequency distributions
      e. Construction and interpretation of graphs
   3. Summary measures:
      a. Characteristics of a data set; Central tendency, dispersion, skewness and kurtosis.
      b. Measures of central tendency:
c. Measures of dispersion

- Range
- Interfractile range
- Average absolute deviation
- Variance and standard deviation
- Uses of the standard deviation: Chebyshev’s rule, application to the normal distribution

d. Basic probability principles

- Introduction/definitions
- Probability rules
- Bayes theorem

e. Probability distribution

- Introduction
- Normal (optional)

V. Activities:

The following activities will be carried out in order to meet course objectives:

- Conferences: basic concepts and examples will be explained
- Assignments: practice exercise will be assigned whenever applies. Assignment must be completed prior to next meeting, when they will be discussed. Examples of applications to areas of interest (economy, marketing, accounting/auditing, etc.) will be presented.
- Partial and final exams.

VI. Evaluation:

Student performance will be assessed using the standard curve and the points accumulated from three exams:

- Partial Exams (2) 66%
- Final Exam (1) 33%

The grading scale is as follows:

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 – 100</td>
<td>A</td>
</tr>
<tr>
<td>80 – 89</td>
<td>B</td>
</tr>
<tr>
<td>70 – 79</td>
<td>C</td>
</tr>
<tr>
<td>60 – 69</td>
<td>D</td>
</tr>
<tr>
<td>Below 60</td>
<td>F</td>
</tr>
</tbody>
</table>
Final exam will include all course

Additional (bonus) points could be provided, at professor’s discretion, through, quizzes or special assignments.

A make-up exam will be offered in the period between the second partial exam and the end of session. Should a student have been absent from any partial exam, he/she must take the make-up. A student who has taken both partials, may take the make-up exam and substitute the lowest of the partial grades, at his/her discretion. The make-up exam will cover all the material from both partials.

VII. Special Notes:

A. Special Accomodations

Students who require special accommodations must request these services at the beginning of the course as soon as they notice that they need help. Students can access this service with Professor Jose Rodriguez, Coordinator of Students with Special Needs at the Guidance and Counseling Office on the first floor at Metro’s Student Center.

B. Plagiarism

Plagiarism, dishonesty, fraud and any other type of manipulation or inappropriate behavior related with academic performance are unacceptable in our institution. Disciplinary actions will be taken on students found guilty of such practice as established in Chapter V, Article 1, Section B.2 of the Student’s Rules and Regulations handbook.


Inter American University has very strict regulations regarding plagiarism (using the ideas or words of others without giving proper credit), so it is important that you specifically read Chapter 5, Article 1, Section B.2c of the Student’ Rules and Regulations Handbook. This section clearly explains what plagiarism is. In addition, it explains the types of sanctions students are exposed to when they commit it.

C. Use of Electronic Devices

Cellular (mobile) telephones and any other electronic device that could interrupt the teaching-learning process or disrupt a milieu favorable for academic excellence will be deactivated. Critical situations will be dealt with in an appropriate manner. The use of electronic devices that permit the accessing, storing or sending of data during tests or examinations is prohibited.
VIII. **Resources:**

**Course Text Book:**

ISBN 970-10-3361-2 (Spanish)  
ISBN 0-07-366062-0 (English)

**Reference Reading:**

- www.statsoft.com  
- www.davidmlane.com/hyperstat  
- www.stat trek.com

**Prepared by:** Prof. José Oliver  
Associate Professor  
August 2009