**Syllabus (2021-Fall)**

|  |  |  |  |
| --- | --- | --- | --- |
| Course Title | Statistics for Business | Course No. | 22233-02 |
| Department/ Major | School of Business | Credit/Hours | 3 |
| Class Time/ Classroom | On line class  But, Exam, Quiz, and some activities will be on Tuesday 5 (2:00-3:15) or  Thursday 6 (3:30-4:45) | | |
| Instructor | Name: Yuncheol Kang (강윤철 교수) | Department: School of Business | |
| E-mail: yckang@ewha.ac.kr | Phone: 02-3277-4203 | |
| Office Hours/ Office Location | Appointment by email / Ewha-Shinsegae 419 | | |

**Ⅰ. Course Overview**

|  |
| --- |
| 1. Course Description |
| This course concentrates on the practice of statistics as a tool for business decision-making. At the end of this semester, you should be able to think critically about data, use graphical and numerical measures, apply standard statistical inference procedures, and draw conclusions. In addition, you will improve your data analysis skills using R software. This course gives students an opportunity to use the free software R to perform statistical computing. The R language provides a rich environment for working with data, especially for statistical modeling and graphics. |

|  |
| --- |
| 2. Prerequisites |
| None |

|  |
| --- |
| 3. Course Format |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | Lecture | Discussion/Presentation | Experiment/Practicum | Field Study | Other | | 80% | % | 20% |  | % |   (Instructor can change to match the actual format of the class.)  Explanation of course format:  Due to the school policy, there will be No offline classes; Videos will be posted weekly on cyber campus. Some on-line activities (e.g. Q&A) may be scheduled on either Tuesday 5 (2:00-3:15) or Thursday 6 (3:30-4:45) |

|  |
| --- |
| 4. Course Objectives |
|  |

|  |
| --- |
| 5. Evaluation System |
| ☑ Relative evaluation ☐ Absolute evaluation ☐ Others :  - Explanation of evaluation system:   |  | | --- | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | Midterm Exam | Final Exam | Quizzes | Presentation | Projects | Assignments | Participation | Other | | 30% | 40% | % | % | % | 20% | 10% | % |   \* Evaluation of group projects may include peer evaluations. |

\* More than 5 week absences: F (You must contact me by email and obtain my permission about every absence by 12 hours before the class time, or your attendance will be marked as un-attended) \* Please see the orientation file.

\*\*You will receive an F if you miss any exam unless you have a permission from the instructor or obtain a university-approved absence in advance.

□ Two homework assignments

· Individual homework assignment

· No late submission will be accepted without any permission from the instructor in advance (by a week before the due date).

□ Exams

· Midterm and Final exam are scheduled.

· Exam questions consist of multiple-selection questions and short-answer questions

· On-line Exam is scheduled. The detailed information will be announced shortly

□ Letter grades

· Grades are based on relative evaluation (grading on a curve)

· Distribution range per letter grade : A (~45%), A+B (~90%), C+D+F (10%~)

· Sub-grade (+/0/-) will be distributed equally within a grade

· This grading scheme is also applied for other course sections.

**Ⅱ. Course Materials and Additional Readings**

|  |
| --- |
| 1. Required Materials |
| Lecture notes will be provided on the cyber campus. |
| 2. Supplementary Materials |
|  |

G. Keller, Statistics for Management and Economics, Cengage Learning, 11th Edition

D. Doane, Applied Statistic in Business and Economics, McGraw Hill, 6th Edition

\* For more details, please refer to the orientation slide

|  |
| --- |
| 3. Optional Additional Readings |
|  |

**Ⅲ. Course Policies**

|  |
| --- |
| * Retaking the course   Retaking this course is strictly prohibited when you took this course provided by this professor (Yuncheol Kang) before.  Retaking is only permitted when you took this course from other instructors. |

**Ⅳ. Course Schedule (15 credit hours must be completed.)**

|  |  |  |  |
| --- | --- | --- | --- |
| Week | Date |  | |
| **Week 1** | 9/2 | Topics & Class Format | Introduction to Statistics and the R software |
| Materials & Assignments |  |
| **Week 2** | 9/9 | Topics & Class Format | Presenting data |
| Materials & Assignments |  |
| **Week 3** | 9/16 | Topics&Class Format | Numerical descriptive measures |
| Materials & Assignments |  |
| **Week 4** | 9/23 | Topics & Class Format | Basic probability |
| Materials & Assignments |  |
| **Week 5** | 9/30 | Topics & Class Format | Basic probability |
| Materials & Assignments |  |
| **Week 6** | 10/7 | Topics & Class Format | Random variable, Discrete probability distribution |
| Materials & Assignments |  |
| **Week 7** | 10/14 | Topics & Class Format | Continuous probability distribution |
| Materials & Assignments |  |
| **Week 8** | 10/21 | Topics & Class Format | Mid Term Exam (10/21 Thursday 15:30 PM) |
| Materials & Assignments |  |
| **Week 9** | 10/28 | Topics & Class Format | Sampling Distribution |
| Materials & Assignments |  |
| **Week 10** | 11/4 | Topics & Class Format | Estimation |
| Materials & Assignments |  |
| **Week 11** | 11/11 | Topics & Class Format | Hypothesis testing I |
| Materials & Assignments |  |
| **Week 12** | 11/18 | Topics & Class Format | Hypothesis testing II |
| Materials & Assignments |  |
| **Week 13** | 11/25 | Topics & Class Format | Analysis of Variance (ANOVA) |
| Materials & Assignments |  |
| **Week 14** | 12/2 | Topics & Class Format | Simple Regression |
| Materials & Assignments |  |
| **Week 15** | 12/9 | Topics & Class Format | Final (12/9 Thursday 15:30 PM) |
| Materials & Assignments |  |
| **Week 16** |  | Topics & Class Format |  |
| Materials & Assignments |  |

**Ⅴ. Special Accommodations**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| \* According to the University regulation section #57-3, students with disabilities can request for special accommodations related to attendance, lectures, assignments, or tests by contacting the course professor at the beginning of semester. Based on the nature of the students’ request, students can receive support for such accommodations from the course professor or from the Support Center for Students with Disabilities (SCSD). Please refer to the below examples of the types of support available in the lectures, assignments, and evaluations.   |  |  |  | | --- | --- | --- | | Lecture | Assignments | Evaluation | | ․ Visual impairment : braille, enlarged  reading materials  ․ Hearing impairment : note-taking  assistant  ․ Physical impairment : access to classroom,  note-taking assistant | Extra days for submission,  alternative assignments | ․ Visual impairment : braille examination paper,  examination with voice support, longer  examination hours, note-taking assistant  ․ Hearing impairment : written examination  instead of oral  ․ Physical impairment : longer examination  hours, note-taking assistant |   - Actual support may vary depending on the course. |

\* The contents of this syllabus are not final—they may be updated.

**ⅤI. AACSB**

**ESB Mission**

To generate and disseminate knowledge to advance the understanding, practice and management of business while seeking to be a recognized leader in a high-quality business education.

- To play a leading role in the development of ideas that shapes the world of business and management.

- To prepare future women leaders of business, education and public services by delivering the quality

education.

**ESB AoL Learning Goals and Traits**

**ESB Code of Ethics**: To promote the growth of ethically responsible women leaders at ESB through adherence to the highest standards of academic integrity and overall ethical conduct, and to develop a sense of individual responsibility to maintain such standards.

 Code of Ethics for Faculty: ESB faculty must teach students with good faith, maintain transparency in grading, and faithfully conduct student counseling.

 Code of Ethics for Students: ESB student is expected to represent her academic product honestly and fairly, and to respect the individual rights of others.