**MIS241 STATISTICS PRACTICE**統計實習

**Spring 2020**

Instructor: Dr. Te-Min Chang (張德民) Office: 管4053

Class meeting: Tuesday 10:10am ~ 12:00pm Classroom: 管3051

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Teaching Assistants:

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TA office hours: TBA

Textbook: S*tatistics for Business and Economics*, 13th ed., MaClave, Benson, and Sincich, 2018.

Course Objective: To supplement class materials of Statistics II with R software language for students to learn hands-on project practices with real sampled financial data. The project practices include subjects of *statistical inference*s that draw conclusions about population characteristics from samples, and of *statistical applications* such as ANOVA and linear regression models.

Course Content:

1. Estimation
2. Hypothesis Testing
3. ANOVA
4. χ2 Tests
5. Simple Linear Regression

Course Schedule:

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| Date | Content |
| 2/23 | Introduction of R software on statistics applications |
| 3/2 | Introduction of R software on statistics applications |
| 3/9 | R software applications |
| 3/16 | Chapter 6 with R |
| 3/23 | Project Practice I |
| 3/30 | Chapter 7 with R |
| 4/6 | Project Practice II |
| 4/13 | **Q&A I** |
| 4/20 | Chapter 8 with R |
| 4/27 | Project Practice III |
| 5/4 | R software applications |
| 5/11 | Chapter 9 with R |
| 5/18 | Project Practice IV |
| 5/25 | Chapter 10 with R |
| 6/1 | Project Practice V |
| 6/8 | Chapter 11 with R **(Q&A I I)** |
| 6/15 | Project Practice VI |
| 6/22 | **QA for Term Project** |

Grading:

Project Practices 70%

Labs 30%

Lab Policies:

1. Labs of practicing statistic applications with R software are offered (see course schedule above). Students will receive hands-on tests in the last hour of the lab practice.
2. Open books and open notes for all tests. Full point for each test is 100.

Team Practice Policies:

1. Students are equally assigned into 6 teams. Team practice session will follow immediately after each R practice session of a specific topic.
2. In team practice session, 4 designated teams with given practice issues will make **oral presentation** about their team practice results relevant to the specific topic.
3. A **written report** is due at the beginning of the oral presentation.