Mathematics for Management
September 2007
Department of International Business
National Taiwan University

Instructor: Dr Yaowen Hsu

Office: Room 809, Building 2, College of Management

Phone: 33664981

Email: yhsu@management.ntu.edu.tw

Class hours: Wednesday   9:10 am – 12:10 am

Office hours: By appointment

OBJECTIVE: The students would have a good knowledge of linear algebra after taking this course, and thus get well prepared for a graduate course on econometrics.

References

1. Johnston, Jack and John DiNardo, 1997, *Econometric Methods*, 4th ed. Appendix A., McGraw-Hill.
2. Searle, Shayle R. and Lois Schertz Willett, 2001, *Matrix Algebra for Applied Economics*, Wiley.
3. Strang, Gilbert. 2006, *Linear Algebra and Its Applications*, 4th ed., Thomson

TOPICS: Vector Spaces, Matrix Algebra, Trace, Inverse, Rank, Determinant, Systems of Linear Equations, Moore-Penrose Inverse, Partitioned Matrices, Kronecker Product, Eigenvalues and Eigenvectors, Quadratic Form, Definite Matrices, Multivariate Normal Distribution and Quadratic Forms, Matrix Differentiation, Constrained Optimization.

GRADING: Team's Homework: 40%. Two Mid-Term Exams: 40%. Final Exam: 20%.