

## Advanced Non-cooperative Game Theory (2010, 1<sup>st</sup> semester)

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Time : Thurs. 10:40–12:10

Room : Rm. 607, 6<sup>th</sup> fl., West 9<sup>th</sup> Bldg.

Office hour : Muto (Tues. 18:30–19:30)

Bando (Fri. 10:40–12:10)

Textbook : Mas-Colell, A. et al. (1995), Microeconomic Theory, Oxford University Press

References : R. Gibbons (1992), Game Theory for Applied Economists,

Princeton University Press,

R. ギボンズ(1995), 経済学のためのゲーム理論入門, 福岡正夫・須田伸一訳, 創文社

岡田 章(1996), ゲーム理論, 有斐閣

武藤滋夫(2001), ゲーム理論入門, 日本経済新聞社

佐々木宏夫(2003), 入門ゲーム理論, 日本評論社

(The books above are available at the Library of the Dept. of Social Engineering (4<sup>th</sup> fl., West 9<sup>th</sup> Bldg.))

Lecture slides can be downloaded from OCW.

(<http://www.ocw.titech.ac.jp/index.php?module=General&action=T0100&GakubuCD=227&lang=JA>)

Prerequisites : Undergraduate-level non-cooperative game theory

Schedule :

|                   |                                                  |
|-------------------|--------------------------------------------------|
| April 8 (Thurs.)  | Basic Elements of Non-cooperative Games I (Ch.7) |
| April 15 (Thurs.) | Basic Elements of Non-cooperative Games I (Ch.7) |
| April 22 (Thurs.) | Simultaneous-Move Games I (Ch.8)                 |
| April 29 (Thurs.) | (Holiday)                                        |
| May 6 (Thurs.)    | Simultaneous-Move Games II (Ch.8)                |
| May 13 (Thurs.)   | Simultaneous-Move Games III (Ch.8)               |
| May 20 (Thurs.)   | Simultaneous-Move Games IV (Ch.8)                |
| May 27 (Thurs.)   | Dynamic Games I (Ch.9)                           |
| June 3 (Thurs.)   | Dynamic Games II (Ch.9)                          |
| June 10 (Thurs.)  | Dynamic Games III (Ch.9)                         |
| June 17 (Thurs.)  | Choice under Uncertainty I (Ch.6(6.A, 6.B))      |
| June 24 (Thurs.)  | Choice under Uncertainty I (Ch.6(6.A, 6.B))      |
| July 1 (Thurs.)   | Choice under Uncertainty I (Ch.6(6.A, 6.B))      |
| July 8 (Thurs.)   | Exercises                                        |
| July 15 (Thurs.)  | Study week                                       |
| July 22 (Thurs)   | (No class - Monday classes)                      |

Evaluation : Homework and final exam

Note: Lectures will be given in English.