**Course Schedule**

School of Mechanical and Aerospace Eng, Seoul National University (Fall 2008)

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| **Course Number** | 446.728 | | **Section** |  | **Course Title** | | Advance Flight Dynamics and Control: Multivariable Control Systems | **Unit** | 3 |
| **Instructor** | Name : Kim, Hyoun Jin | | | | | website : http://icsl.snu.ac.kr | | | |
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| Office Hour / Place : M 16:00-18:00 / Bldg 301-1035 | | | | | | | | |
| **Schedule** | **Wk** | **Topics** | | | | | | | |
| 1 | Introduction to Linear MIMO Systems | | | | | | | |
| 2 | Review of Linear Algebra | | | | | | | |
| 3 | Controllability and Observability | | | | | | | |
| 4 | System Norms | | | | | | | |
| 5 | Interconnected Systems | | | | | | | |
| 6 | LQ, LQG, H2, H∞ Control System Design | | | | | | | |
| 7 | Lyapunov and Riccati Equations | | | | | | | |
| 8 | H∞ Control | | | | | | | |
| 9 | Performance Specifications | | | | | | | |
| 10 | Uncertainty and Robustness | | | | | | | |
| 11 | mu Analysis | | | | | | | |
| 12 | Discussion and Final Term | | | | | | | |
| 13 | Balanced Realization | | | | | | | |
| 14 | Convex Optimization | | | | | | | |
| 15 | Linear Matrix Inequality (LMI) | | | | | | | |