SYLLABUS OR 680 – Applications Seminar Spring 2005

Instructor: Dr. Eswar Sivaraman Phone: (703) 993-1693 E-mail: esivaram@gmu.edu

Office: Science & Technology II, Room 323 Office Hours: Mon 4:00–6:00 pm & by appt.

Course Hours: Thursday 7:20 – 10:00 pm Location: Innovation Hall, Room 137 Course URL: http://classweb.gmu.edu/esivaram/OR680/

Course Outline:

This course is designed to be the capstone course for the M.S. programs in Operations Research and the Certificate in Computational Modeling. It can also substitute for the capstone project requirements of the M.S. in Systems Engineering program. The focus is on model development and implementation involved in the practice of operational modeling. A key activity is the completion of a major applied group project. Work includes project proposal planning, completion, documentation, and presentation.

Course Texts:

Although the course does not have firm deliverables like assignments, exams, etc., the following references would be useful additions to your professional reference on contemporary problem-solving and presentation techniques.

- 1. **How to Solve It: Modern Heuristics** by Z. Michalweicz and D.B. Fogel, Springer, 2nd edition, 2004.
- 2. Vroom! Turbo-Charged Team Building by M. Shandler and M. Egan, Amacom Books, 1996.
- 3. Exploring Requriements: Quality before Design, by D.C. Gause and G.M. Weinberg, Dorset, 1989.
- 4. Adios, Strunk and White: A Handbook for the New Academic Essay by G. Hoffman and G. Hoffman, Verve, 3rd edition, 2003.
- 5. Semantics in Business Systems: The Savvy Manager's Guide by D. McComb, Morgan-Kaufmann, 2003.
- 6. Swarm Intelligence by J. Kennedy and R.C. Eberhart, Morgan-Kaufammn, 2001.