

**Syllabus SYST 699/OR 699**  
**Masters Program Final Project Course**  
**Spring 2015**

**Instructor:** Dr. Philip Barry

**Class Location:** Nguyen Engineering Building Room 2608

**Class Time:** Thursdays, 4:30-7:10pm

**Office Location:** Nguyen Engineering Bldg. Room 2608

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**Office Hours:** After class, or by appointment

**Text:** *None*

**Course Objectives:** This course serves as the synthesis activity for students completing a masters' degree in Operations Research (OR 699) or Systems Engineering (SYST 699). Students will complete a major applied and realistic project in their field. Work will be done in small groups. Depending on the nature of the problem, the groups will be comprised of a combination of operations researchers and systems engineers in the proportions appropriate to the problem at hand. The students will prepare a comprehensive final report to the study sponsor, as well as a briefing to the sponsor and the entire SEOR department faculty. Students will prepare a website that describes the problem, the solution approach, the results and serves as a repository for all written submissions. Regular in-progress review sessions in which students will report their progress will be held. In addition, there will be team meetings with Dr. Barry.

Below is a tentative schedule that is likely to change based on the progress of the projects and the resulting reports.

*NOTE: The following schedule is likely to change as we learn more about the problems and the issues. I want to use class time productively so we will have brainstorming sessions, as needed. It is the student's responsibility to know the changed schedule!*

<b>Date</b>	<b>Topic</b>	<b>Assignment</b>
<b>1/22</b>	<b>Project Descriptions</b>	<b>Team organization and project selection</b> <i>Team organization and selection of projects. Discussion of project scheduling, risk analysis, data collection, sponsor engagement plan, and generation of project charter to include roles/responsibilities.</i>
<b>1/29</b>	<b>Initial Project Proposal</b>	<b>Project Proposal</b> <i>Present formal problem definition to include project completion criteria, measures of success and risk analysis. Summarize discussion of meeting with the client. Adjust project schedule, charter and engagement plan accordingly.</i>
<b>2/5</b>	<b>Working Session</b>	<b>Class meets – short discussion of challenges and then work in individual teams</b>
2/12	Working Session	Class does not meet Work privately on data collection, project approach and get ready for next presentation
<b>2/19</b>	<b>In Progress Review 1</b>	<b>Team Presentation (approx. 20 min)</b> <i>This is a formal presentation to the class. Review problem definition. Discuss modifications to measures of success, risk analysis, problems you are facing and approach to resolving. Summarize discussions with the client. Summarize modifications to project schedule, charter and engagement plan. Send Presentations to Dr. Barry by Tuesday 2/17/2015</i>
2/26	Working Session	Class does not meet – Professor on Travel Teams reserve this time to meet and make progress on project.
<b>3/5</b>	<b>Individual Team Meeting with Professor Team</b>	<i>Teams prepare facilitated conversation for status and action as appropriate. Format: Conversation aided by slides/demonstration as appropriate. Also, provide a discussion of progress to date, risk assessment for completing project on time.</i>
3/12	Working Session	Class does not meet – Spring Break Teams reserve this time to meet and make progress on project.
<b>3/19</b>	<b>In Progress Review 2</b>	<b>Team Presentation (approx. 20 min)</b> <i>This is a formal presentation to the class. Discuss progress to date. Identify modifications to measures of success, risk analysis, problems you are facing and approach to resolving. Summarize discussions with the client. Summarize modifications to project schedule, charter and engagement plan. Provide outlook for moving forward. Send Presentations to Dr. Barry by Tuesday 3/17/2015</i>
3/26	Working Session	Class does not meet Teams reserve this time to meet and make progress on project.
<b>4/2</b>	<b>Individual Team Meeting with Professor Team</b>	<i>Teams prepare facilitated conversation for status and action as appropriate. Format: Conversation aided by slides/demonstration as appropriate. Also, provide a discussion of progress to date, risk assessment for completing project on time.</i>

4/9	Working Session	Class does not meet
	Teams reserve this time to meet and make progress on project.	

<b>4/16</b>	<b>Class Meeting</b>	<b>Working Copy of Final Report</b>
	<i>Short discussion of final presentation and report. Students to bring working copy of final report to class. Balance of the time is reserved for meetings with Professor.</i>	

**4/23 Dry Run of Final Presentation to External Reviewers Drafts of Final Report and Presentation**  
*Team Presentation (approx. 20 min) of final report to a panel of external reviewers. A draft of the final report is due. Send Presentations to Dr. Barry by Tuesday 4/21/2015*

**4/30 Individual Team Meetings w/ instructor**  
*Discussion of review comments for the final report as well as Team Presentation*

**5/8 FINAL PRESENTATION TO THE FACULTY**  
***NOTE: This is Friday afternoon so please make preparations now to attend this session. We want all students present for this presentation, including the distance- learning students. Please let me know if this is not possible!***

## Other Details

<b>Grading:</b>	Proposal	10%
	Interim presentations	20%
	Website	10%
	Final Report	30%
	Final Presentation	<u>30%</u>
		100%

### University Policies

#### Honor Code:

GMU is an Honor Code university; please see the Office for Academic Integrity for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated gravely. What does academic integrity mean in this course? Essentially this: when you are responsible for a task, you will perform that task. When you rely on someone else's work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. Another aspect of academic integrity is the free play of ideas. Vigorous discussion and debate are encouraged in this course, with the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives, and traditions. When in doubt (of any kind) please ask for guidance and clarification.

#### Disability Accommodations:

If you have a learning or physical difference that may affect your academic work, you will need to furnish appropriate documentation to the Office of Disability Services. If you qualify for accommodation, the ODS staff will give you a form detailing appropriate accommodations for your instructor. In addition to providing your professors with the appropriate form, please take the initiative to discuss accommodation with them at the beginning of the semester and as needed during the term. Because of the range of learning differences, faculty members need to learn from you the most effective ways to assist you. If you have contacted the Office of Disability Services and are waiting to hear from a counselor, please tell me.

#### Email:

*Students must use their MasonLive email account to receive important University information, including messages related to this class. See <http://masonlive.gmu.edu> for more information. You will need an email account to get all notices that are posted on mymason.gmu.edu (Blackboard).*