

**OPERATIONS RESEARCH  
SPRING 2010  
ASSIGNMENTS  
SHEPHERD UNIVERSITY**

The key to success is practice, practice often. This is a 3 credit hour course. Thus you should expect to spend at least 9 hours outside of class studying for this course if you expect to earn a passing grade. The following list is a minimum set of problems that you should thoroughly understand.

**1. Week 1, present on Jan. 15, quiz on Jan. 20.**

Chapter 1 Read and study all of Chapter 1.

Chapter 2 Read and study all of Chapter 2.

Chapter 3 Read and study all of Chapter 3.

The following set of Chapter 3 problems should be done by hand.

3.1: 2,3,5,6,7,8,10,12,13,14

3.2: 1,3,4,5,6

3.4: 5,6,7,8

**2. Week 2, present on Jan. 22 and Jan. 25, quiz on Jan. 27.**

Chapter 3 The following set of Chapter 3 problems should be done using Excel Solver.

3.1: 11

3.4: 9,10,12,14

3.5: 2,4,5

**3. Week 3, presentation on Feb 1 and Feb 3.** Present your group's case study from Chapter 3. The solution must be presented in report form. Your report and Excel spreadsheet(s) must be sent to me at celmer@shepherd.edu before the start of class on Monday Feb 1. All emails, reports, and spreadsheets must be labeled/titled appropriately or they will be rejected. Confirm receipt of your work before the first 2 minutes of class has past.

**4. Week 4, presentation on Feb 5 and quiz on President's Day, Feb 15.** Do the following problems by hand using the simplex (any form) method (no need to follow individual instructions).

Chapter 4 3-4,3-5,4-6,4-8

Chapter 5 3-1,3-2,3-3,3-4

**5. Week 5, postponed.**

**6. Week 6, presentation on Feb 17 and quiz on Feb 19.** Do the following problems by hand using the simplex method (follow instructions this week).

Chapter 4 6-2 (a) and (b), 6-3 (a) and (b), 6-5 (a) (b) and (c), 6-12 (a) (b) and (c)

Chapter 5 1-6 (a) and (b), 1-10 (a) (b) and (c), 1-19, 1-21

**7. Week 7, presentation on Feb 24 and Feb 25.** Present your group's case study from Chapter 4. The solution must be presented in report form. Your report and Excel spreadsheet(s) must be sent to me at celmer@shepherd.edu before the start of class on Wednesday Feb 24. All emails, reports, and spreadsheets must be labeled/titled appropriately or they will be rejected. Confirm receipt of your work before the first 2 minutes of class has past.

**8. Week 8, presentation on Mar 3 and Mar 5, and quiz on Mar 5.** Do the following problems by hand using the simplex method (follow instructions this week).

Chapter 6 1-1, 1-2, 1-3 (also solve this one), 1-7, 3-1, 4-10, 6-1, 6-2, 6-3, 7-2

**9. Week 9, presentation on March 10 and March 12, quiz on March 12.**

- Present your group's case study from Chapter 8. The solution must be presented in report form. Your report and Excel spreadsheet(s) must be sent to me at celmer@shepherd.edu before the start of class on Wednesday March 10. All emails, reports, and spreadsheets must be labeled/titled appropriately or they will be rejected. Confirm receipt of your work before the first 2 minutes of class has past.
- Quiz problems: 8.1-2, 8.1-7, 8.3-1, 8.3-4.

**10. Week 10, presentation on March 24 and March 26, quiz on March 26.**

- Present your group's case study from Chapter 9. The solution must be presented in report form. Your report and Excel spreadsheet(s) must be sent to me at celmer@shepherd.edu before the start of class on Wednesday March 24. All emails, reports, and spreadsheets must be labeled/titled appropriately or they will be rejected. Confirm receipt of your work before the first 2 minutes of class has past.
- Quiz problems: 9.4-2.

**11. Week 11, presentation on March 31 and April 2, quiz on April 2.**

- Present your group's case study from Chapter 11. The solution must be presented in report form. Your report and Excel spreadsheet(s) must be sent to me at celmer@shepherd.edu before the start of class on Wednesday March 31. All emails, reports, and spreadsheets must be labeled/titled appropriately or they will be rejected. Confirm receipt of your work before the first 2 minutes of class has past.
- Quiz problems:

**12. Week 12, presentation on April 7 and April 9, quiz on April 9.**

- Present your group's case study from Chapter 12. The solution must be presented in report form. Your report and Excel spreadsheet(s) must be sent to me at celmer@shepherd.edu before the start of class on Wednesday March 10. All emails, reports, and spreadsheets must be labeled/titled appropriately or they will be rejected. Confirm receipt of your work before the first 2 minutes of class has past.
- Quiz problems:

**13. Week 13, presentation on April 14 and April 16, quiz on April 16.**

- Present your group's case study from Chapter 15. The solution must be presented in report form. Your report and Excel spreadsheet(s) must be sent to me at celmer@shepherd.edu before the start of class on Wednesday March 10. All emails, reports, and spreadsheets must be labeled/titled appropriately or they will be rejected. Confirm receipt of your work before the first 2 minutes of class has past.
- Quiz problems:

**14. Week 14, presentation on April 21 and April 23, quiz on April 23.**

- Present your group's case study from Chapter 17. The solution must be presented in report form. Your report and Excel spreadsheet(s) must be sent to me at celmer@shepherd.edu before the start of class on Wednesday March 10. All emails, reports, and spreadsheets must be labeled/titled appropriately or they will be rejected. Confirm receipt of your work before the first 2 minutes of class has past.
- Quiz problems:

**15. Week 15, presentation on April 28 and April 30, quiz on April 30.**

- Present your group's case study from Chapter 18. The solution must be presented in report form. Your report and Excel spreadsheet(s) must be sent to me at celmer@shepherd.edu before the start of class on Wednesday March 10. All emails, reports, and spreadsheets must be labeled/titled appropriately or they will be rejected. Confirm receipt of your work before the first 2 minutes of class has past.
- Quiz problems: