

Syllabus: Math and CS 339
Operations Research
Spring 2020

Instructor: Dr. Hundley

Office/Hours: Monday and Friday at 11, Wed at 3.

Feel free to schedule an alternative time to meet if you can't make these hours. I am typically in the office most afternoons, so if my door is open, feel free to stop by.

Contact info: *Office Ph:* 527-5151, *Email:* hundledr@whitman.edu

Class Website: <http://people.whitman.edu/~hundledr> . Occasionally I will put things on Canvas (and will let you know in class).

Course Numbering: This course is cross listed as Math 339 and CS 339, but all the material is identical for both sections.

Text

Introduction to Mathematical Programming (Operations Research, Vol 1). By Wayne Winston and Munirpallam Venkataramanan, 4th edition. We will cover chapters 3, 4, 6, 7, 8, 9 (we may run short for the last sections).

For us, this text is completely interchangeable with Wayne Winston's larger text, "Operations Research: Applications and Algorithms" (that is, our book is the first several chapters of the larger text).

We'll be using various software packages. The programs LINDO and LINGO come with the text (see me if you don't have the CD). We will occasionally use Excel- or more precisely, the free version, called LibreOffice Calc. We may also look at Matlab, which is only available in the computer labs in Olin.

Grading Criteria.

- **HOMEWORK:** Will be assigned daily, and will make up 20% of your overall grade. The starred problems should be written up completely (and neatly) and will be collected weekly (we'll discuss this in class).
- **EXAMS:** We will have two exams and a final exam. The exam dates will be: **Friday, Feb 28, Friday, Apr 24**. These dates will not change, so you may plan around them. Overall, the exams will make up 50% of the overall grade (equally weighted).

The final will be administered at the time published on the Registrar's website and may rely on topics from the first two exams. The final will be worth 30% of your overall grade.

The exams may also have a take home component (solving problems using the software). This will be announced closer to the exam date, but with plenty of advance

time to plan around your other things. Typically, the take home exam is there so that you may use the computer.

GRADING: Grading is done on a standard scale:

$A = 92 - 100$ $A- = 90 - 91$ $B+ = 88 - 89$ $B = 82 - 87$ $B- = 80 - 81$
 $C+ = 78 - 79$ $C = 72 - 78$ $C- = 70 - 71$ $D = 60 - 69$ $F = 59$ and below

Health problems or Disabilities

If you have to miss class due to health problems, you need to get in touch with me as soon as possible, either by phone or email. If you are ill on the day of an exam, we can work out other arrangements for you **only** if you receive verification from a health professional (i.e., go to the clinic and get checked out). You can then have the Dean of Student's office send a message to that effect to me- I don't need to know any details, just that you have gone through the procedures. This includes mental health problems, as well as chronic conditions.

If you have a learning disability, we can make the proper arrangements for you. All arrangements need to go through the office of Academic Resources (Mem 205) *prior* to taking an exam. (This also applies generally: If you're having academic difficulties, see the people at Academic Resources!)

Academic Honesty.

Academic standards will be *strictly* adhered to as outlined in your student handbook. This means that cheating will not be tolerated.

Looking at another student's exam or quiz (whether or not you mean to copy answers) while taking it will be considered cheating.

Students caught cheating will fail the exam or quiz, and the incident will be referred to the Dean of Students, as outlined in your student handbook.

Other Notes:

- **Take Home Exams:** You are only allowed to use the resources specified on the exam- Usually only materials given in this course. That means that you are NOT allowed to work together (unless specifically allowed) and you may not use any other materials from the internet. If you get stuck, you can ask me for a hint.
- **Electronic Devices** As a courtesy to your colleagues, please refrain from using electronic devices while in class (put phones away). These are very distracting to me and the others around you. If you must use an electronic device as an aid to your learning, please discuss it with me in advance.
- **Absences** As a courtesy, please let me know if you're going to miss class. Student athletes should let me know in advance of missing class so we can make arrangements to make up missed work.

- **Email:** Occasionally I will need to contact you via email with important announcements. You should check your Whitman email at least once a day!