## Topics for the first midterm

The first midterm will cover the material of Sections 1.1, 1.2, 1.3, 1.4, 1.6, 2.1, 2.2 in the book *except* the following: ruled surfaces and Examples and Exercises 1.1.19, 1.1.20, 1.1.21, 1.1.22, 1.1.23, 1.3.12, 1.3.13, 1.3.14, 1.3.15, 1.3.16, 1.3.17, 1.4.4, 2.1.2, 2.1.24, 2.1.25.

The midterm also covers the material of Exercises 1.5.13, 1.5.14, 1.5.15, 1.5.16, 1.5.17.

In addition, please make sure you know the statement of the Implicit Function Theorem and how to use it.

Please also review the proofs in the material above. Some of them will be on the midterm. For the test it will not matter which version of a proof you present, as long as the arguments are correct.