

Homework from Revised Second Edition:

Mission 1[30pts+8bpts][due 1-24-14] read Chapter 1. Do problems:

- Section 1.2 # 2, 3d, 5
- Section 1.3 # 1c, “2c”, 3c, 3d, 3f, 4, 5
- Section 1.4 # 2, 8, 9
- Section 1.5 # 1, 3, 5, 6
- Section 1.6 # 1, 9
- Section 1.7 # (well, I like many of these, but for the moment they seem a distraction from our main aims)

Mission 2[30pts+4bpts][due 1-27-14] read sections 2.1-2.4. Do problems:

- Section 2.1 # 3, 6
- Section 2.2 # 1, 5, 6a, 6b, 10
- Section 2.3 # 2, 5, 6, 10
- Section 2.4 # 1, 2, 4, 9, 10, 17.

Mission 3[30pts][due 2-3-14] read 2.5-2.9. Do problems:

- Section 2.5 # 1b, 2a, 2f, 3, 4
- Section 2.6 # 1, 2, 3
- Section 2.7 # 1, 2, 5, 8
- Section 2.8 # 1, 2, 3

Mission 4[30pts][due 2-10-14] read Chapter 3. Do problems:

- Section 3.1 # 1, 2, 7
- Section 3.2 # 3
- Section 3.3 # 2, 4, 5, 6
- Section 3.4 # 1a, 4, 5
- Section 3.5 # 1, 2, 3, 6

Mission 5[30pts][due 3-7] read Chapters 4-5. Do problems:

- Section 4.1 # 9
- Section 4.2 # 1, 5abc
- Section 4.3 # 4,6
- Section 4.4 # none
- Section 4.5 # 4
- Section 4.6 # none
- Section 4.7 # 5
- Section 4.8 # none
- Section 5.1 # 2,3,4
- Section 5.2 # none
- Section 5.3 # 2
- Section 5.4 # 6
- Section 5.5 # none
- Section 5.6 # 2,7
- Section 5.7 # 3

Mission 6[30pts][due 3-28] read Sections 6.1-6.5. Do problems:

- Section 6.1 # 1, 2, 3
- Section 6.2 # 1, 2
- Section 6.3 # 1, 2, 3, 4, 5

Mission 7[30pts][due 3-28] read Sections 6.1-6.5. Do problems:

- Section 6.4 # 1, 5, 6, 8, 9, 10[see isometries exist only if DEqns can be solved!], 11
- Section 6.5 # 1, 2, 5[wow, neat]
- Section 6.6 # 1b, 2, 3

Tentative Schedule:

Week 1[1-13,1-17]: Calculus on curves and basic set-up (1.1-2.4)

Week 2[1-20,1-24]: Frame Fields and connection form (2.5-2.9)

Week 3[1-27,1-31]: Euclidean Geometry (3.1-3.6)

Week 4[2-3,2-7]: Calculus on a Surface (4.1-4.9)

Week 5[2-10,2-14]: Calculus on a Surface (4.1-4.9)

Week 6[2-17,2-21]: Shape Operators (5.1-5.8)

Week 7[2-24,2-28]: Shape Operators (5.1-5.8)

[Test 1, 2hrs time of your choosing, any day this week 2-25 to 2-27]

Week 8[3-3,3-7]: Geometry of Surfaces in \mathbb{R}^3 (6.1-6.4)

Spring Break

Week 9[3-17,3-21]: Geometry of Surfaces in \mathbb{R}^3 (6.1-6.4)

Week 10[3-24,3-28]: Geometry of Surfaces in \mathbb{R}^3 (6.5-6.9)

Week 11[3-31,4-4]: Review and Test 2.

Week 12[4-7,4-11]: Chapter 7.

Week 13[4-14,4-18]: Chapter 8.

Week 14[4-25]: (no Monday, Easter) Chapter 8.

Week 15[4-28]: Chapter 8.