PART I. GENERAL INFORMATION

1. Classroom and Meeting Time: Univ H. 205; MTWF 08:00am-08:50
2. Text Book: James Stewart, Multivariable Calculus (8th ed.)
3. Instructor: Peng Lu
4. Office Hours: MWF 10:00am-10:50
5. Office and Phone Number: Univ H. 304; 541 346 4727
6. Email Address: penglu@uoregon.edu
7. Web Page: https://canvas.uoregon.edu/
   https://webwork2.uoregon.edu/
8. Learning Outcome: Understand/can-do the following:
   • geometry of space (cross product, dot product, projection formula, equations of lines and planes);
   • basic quadratic surfaces (paraboloids, hyperboloids of one sheet, hyperboloids of two sheets, ellipsoids, cylinders);
   • computing partial derivatives, obtaining the best linear approximation, determining the tangent plane;
   • computing with and applying the chain rule, and computing directional derivatives.
   • geometry of the gradient, at a local minima or maxima the gradient vanishes (i.e. the function has a critical point).
   • applying the second derivative test (Hessian) to find critical points and to label them as a local minima, local maxima, saddle point, etc.
   • solving problems involving the methods of Lagrange multipliers to find local minima and maxima of functions subject to constraints.

9. Special Accommodation: If you are a student with a documented reason arguing for special accommodations, please meet with me soon to discuss your needs. If you have not already requested a notification letter from Accessible Education Center, 541-346-1155, uoaecc@uoregon.edu outlining recommended accommodations, please do so soon.

PART 2. HOMEWORK and EXAMS

1. Homework: About nine homework will be given through WebWork2, each homework will be open for about a week.
2. Exams: Two in-class exams and one final exam
Graphing calculators are allowed
No makeup for tests unless there is a documented reason

3. Grade: Homework: 15%; Each test: 25%; Final exam: 35%

4. Important dates:
Exam 1: Tuesday, October 19, 2021 in class;
Exam 2: Tuesday, November 16, 2021 in class;
Final Exam: 10:15am-12:15 Tuesday, December 07, 2021
You must bring photo ID to all the exams

PART III. OUTLINE AND ASSIGNMENTS

Week 1: September 27 to October 01 (§12.1, 12.2, 12.3)
Homework on WebWork2: Week1Fall2021

Week 2: October 04 to 08 (§12.4, 12.5, 12.6)
Homework on WebWork2: Week2Fall2021

Week 3: October 11 to 15 (§12.6, 13.1)
Homework on WebWork2: Week3Fall2021

Week 4: October 18 to 22 (§13.2)
Review on Monday; First exam on Tuesday
Homework on WebWork2: Week4Fall2021

Week 5: October 25 to 29 (§13.3, 13.4)
Homework on WebWork2: Week5Fall2021

Week 6: November 01 to 05 (§14.1, 14.2)
Homework on WebWork2: Week6Fall2021

Week 7: November 08 to 12 (§14.3, 14.4)
Homework on WebWork2: Week7Fall2021

Week 8: November 15 to 19 (§14.5, 14.6)
Review on Monday; Second exam on Tuesday
Homework on WebWork2: Week8Fall2021

Week 9: November 22 to 26 (§14.6, 14.7, 14.8)
Homework on WebWork2: Week9Fall2021

Week 10: November 29 to December 03 (§14.8)
No homework Review for Final Exam
PART IV. Some Remarks

(i) Though the WeBWorK assignments are submitted online for final answers only, it is crucial that you work out answers first on a piece of paper with all steps, this helps you internalize the learning.

(ii) Group work on homework is encouraged.

(iii) Time now are rough as we all know, but I plan to run the class as close to my teaching before 2020 as possible (attempting to normalize our life).

(iv) Finally I would like to thank you for registering in this class. You take good care of yourself.