

**Math 405: Introduction to Computational Mathematics**  
**Reading and Homework Assignment 2**

PROF. WICKERHAUSER

You are allowed to collaborate with one other person on homework, but then you must indicate both contributor's names on your solution sheet.

You are also encouraged to work additional exercises from the indicated sections, although the homework grade will be based only on the exercises listed below.

Please return your solutions to me by the end of class on the due date. **Late homework will not be accepted.**

Read Sections 2.1–2.2.

**P. 20, Exercises 2.1.**

2.1.1, 2.1.3

**P. 37 Exercises 2.2.**

2.2.2, 2.2.4, 2.2.6

**Further exercise.**

1. Prove that no choice of  $c_1$ ,  $c_2$ , and  $c_3$  in the function  $\phi$  defined on p.28 can produce a third-order method.