1. **Course learning objectives:** Basic topics:

   Complex number geometry and algebra, analytic functions, integration in the complex plane, infinite series, residues and poles of complex functions, applications of residues for integration. Applications of complex analysis: Bode plots of transfer functions of linear systems, and harmonic functions for electrostatics and fluid flow, and integration.

   Problem solving fluency:

   In addition to topical content, students will also gain experience and further mastery of complete problem solving fluency. Students will be able to read and interpret problem objectives, be able to select and execute appropriate methods to achieve objectives, and finally, be able to interpret and communicate results.

2. **Prerequisites:** “C” or better in Math 2250 or (Math 2270 and Math 2280).

3. **Lectures:** Tuesdays and Thursdays 12:25pm-01:45pm in the Marriott Library, room 1130 (M LI 1130).

4. **Instructor:** Sean Lawley
   - Email: lawley@math.utah.edu
   - Office: LCB 306

5. **Website:** https://utah.instructure.com (Canvas)

6. **Email:** You are expected to check your official university email address daily. I frequently email important information. I suggest having Canvas automatically email you when I post items on Canvas.


8. **Final Exam:** We will have a final exam in our usual classroom on Friday, April 26, from 1-3pm.