**Weeks 13 and 14 (Apr 22 – 26, 29, and 30, Lectures 25, 26, and 27) Teaching and Learning**

**Topics**

**16.5**: Parametric surfaces; surface areas (continued from last week if needed).

**16.6**: Surface integrals (mass of a thin surface plate); orientable surfaces (“surfaces with two sides”); surface integrals of vector fields (flux across a surface).

**16.7**: The curl of a vector field; Stokes’ theorem.

**16.8**: The divergence theorem and a unified theory.

**Assignment 13\*\***

16.6, #1,6,14,19,26,29,37

16.7, #1,4,7,14,15,21

16.8, #5,10,13,19,22,28,29,30

\*\* This assignment is for practice only and no submission is required to help with students’ final exam preparation; it will not be graded. **However, students are strongly encouraged to attempt them all and ask questions if they encounter any difficulties, as these chapters will be within the final exam scope.**

**Note**:

* Quiz 4 will be conducted in Week 13.
* Week 14 will be the last week with tutorials. Due to the holidays (May 1 – 5), Only Sunday Apr 28 (a make-up day for Friday), Apr 29 (Mon) and Apr 30 (Tue) will have tutorials (and there will not be a tutorial on Wednesday or Thursday in Week 14).
* Week 15 (May 6 – 10, after the holiday) will be the final preparation week for the students. Lectures are not mandatory this week unless you have not finished Chapter 16.8 yet --- each instructor can decide what to do for his/her sections (review session, office hours, self-prepared optional topics, etc.).
* The final exam week will be May 11 – 18 (exam date for MAT1002 will be determined by the Registry Office).