

18.024 UNIT VII: GREEN'S THEOREM AND APPLICATIONS

Thursday, April 26 Recitation: Review.

Practice problems: 11.15: 1, 9, 16; 11.18: 4, 6; 11.34: 11, 25.

Thursday, April 26.

Lecture: Green's theorem.

Read: 11.19, 11.20, 11.23, E.1–E.6.

Do: 11.22: 1abc, 2, 3, 4, 5, 6a.

Friday, April 27: QUIZ 3 on Units V and VI.

Tuesday, May 1.

Lecture: When is a planar vector field conservative?

Read: 11.21 (non-rigorous discussion), E.8–E.20 (rigorous discussion).

Do: E.6: 1, 2; 11.25: 3, 4; E.21: 2, 3.

Thursday, May 3.

Lecture: Change of variables in a double integral.

Read: E.23–E.28, 11.27.

Do: 11.28: 2, 4, 8, 14, 15, 17.

Friday, May 4.

Lecture: Cylindrical and spherical coordinates.

Read: E.29–E.32, 11.32, 11.33 (examples 1 and 2 only).

Do: 11.34: 10, 14, 18, 19, 24, 27.

Hand in Friday, May 4 in lecture (7 points/problem).

1. E.7: 3.
2. 11.25: 5.
3. E.35: 5

Date: Spring 2001.