# **18.024 UNIT VI: MULTIPLE INTEGRALS**

## Friday, April 13.

Lecture: Double integrals over rectangles.

Read: 11.1–11.5, D.1–D.8, 11.7–11.8.

Do: 11.9: 1, 3, 5, 9, 11, 14; p. 246: Find interior S, exterior S, and boundary S for the sets in exercise 2.

Reminder: homework from Unit 5 is due today!

## Thursday, April 19.

Lecture: Double integrals over general regions.

Read: D.8-D.20 (skip proofs), 11.12-11.14.

Do: 11.15: 6, 8a, 10, 12, 14, 15.

#### Friday, April 20.

Lecture: Applications: triple integrals.

Read: 11.13, 11.16.

Do: 11.18: 1, 7, 10; 11.34: 1, 2, 6, 25.

Hand in Friday, April 20 in lecture (10 points/problem).

D.26: 3.
D.26: 4.

D.26 #5 is a challenge problem for extra credit.

Tuesday, April 24 Recitation: Small-span and extreme value theorems.

*Read:* C.28–C.33.

### Tuesday, April 24.

Lecture: Existence of double integrals.

*Read:* D.8–D.25.

Date: Spring 2001.

Do: D.27: 6 (7, 8 optional).

(Upcoming quiz on Friday, April 27!)