

VANDERBILT UNIVERSITY
MATH 196 — DIFFERENTIAL EQUATIONS WITH LINEAR ALGEBRA
EXTRA CREDIT — FORCED OSCILLATIONS AND RESONANCE.

Due date: Thursday, April 4th.

Instructions.

- (1) Read section 5.6 of the textbook. Pay particular attention to the following concepts:
 - natural frequency;
 - amplitude;
 - amplification factor;
 - resonance;
 - transient solution.
- (2) Explain each of the above concepts with your own words. Give examples in each case.
- (3) Do problems 26, 27 and 28 of section 5.8.