

ENEE 420 Homework Assignments

Homework is due at the beginning of the next class period after it is assigned. The date shown in each item is the date the homework was assigned.

1. January 29: 2.1, 2.6, 2.7
2. February 5: 2.8, 2.9, 2.10
3. February 17: 2.13, 2.14, 2.22
4. February 19: (Due February 26) 2.31 (Hint: MATLAB has Bessel functions), 2.32, 2.35
5. February 26: 2.39, 2.43 (Hint: $\text{sgn}(\cos \theta)$ is a periodic square wave as a function of θ , so expand it in a Fourier series as a function of θ .)
6. March 24: 1.1, 1.5, 1.6
7. March 26: 1.8, 1.11(c), 1.13, 1.15
8. March 31: 1.17 (Assume the pdf for f is even.), 1.23, 1.26 (Replace $\cos 2\pi f_c t$ by $\cos(2\pi f_c t + \Theta)$ with Θ uniformly distributed over $[0, 2\pi)$.)
9. April 7: 1.30
10. April 9: 2.46
11. April 14: 2.50, 2.52
12. April 21: 3.1, 3.3 (sinc $x = \frac{\sin \pi x}{\pi x}$, Nyquist interval = $1/T$), 3.5