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1 % Sounak Ghosh
2 % 9/28/19
3 % ECE 202 - Fall 2019 - MATLAB Exercise M4
4 % (c) Normalized Gaussian
5
6 clear % clears all variables in the workplace; avoids common errors
7 clc % clears all previous outputs in the command window(s)
8
9
10 x = linspace(0,10,500); % -5 to 5s, needed for plot
11 P = 1/(2*pi^(1/2)) * exp(-(x-5).^2/4); % function for Normalized Gaussian
12 plot(x, P, '--'); % plot of time vs. P
    (t), with a red line
13 title('ECE 202, Exercise M4, part (c): Normalized Gaussian', 'FontSize', 24) % Plot title with 24 font
14 xlabel('distance x (m)', 'FontSize', 18); % x axis label
15 ylabel('P(x)', 'FontSize', 18); % y axis label
```