MASSACHUSETTS INSTITUTE OF TECHNOLOGY Department of Electrical Engineering and Computer Science

6.003: Signals and Systems — Spring 2004

Errata for Tutorials 1 - 12

Tutorial 1 (February 9 and 10)

• No known errors.

Tutorial 2 (February 16 and 17)

No known errors.

Tutorial 3 (February 23 and 24)

• On page 43, the output of the DT LTI system diagram is:

$$x(t) = H(z)e^{st}$$
.

It should be:

$$y[n] = H(z)z^n.$$

Tutorial 4 (March 1 and 2)

- On page 61, in the expression for $H(j\omega)$, the a_0 should be b_0 .
- On page 71, the diagram is for the DT case, but the prose describes the CT case. The diagram should be CT so that the signals are x(t), $y_1(t)$ and y(t) and the impulses responses of the two systems are $h_1(t)$ and $h_2(t)$, and their frequency responses are $H_1(j\omega)$ and $H_2(j\omega)$.

Tutorial 5 (March 8 and 9)

• No known errors.

Tutorial 6 (March 15 and 16)

• No known errors.

Tutorial 7 (March 29 and 30)

• On page 147, the top describes the transfer function H(s) of a second-order system. Instead, it should be the frequency response $H(j\omega)$.

Tutorial 8 (April 5 and 6)

- On page 163, the word "impulse-invariance" is misspelled in the second box.
- On page 173, the first paragraph claims that CT processing of DT signals is not practical in real life. This is not true. There are, in fact, very interesting CT implementations of DT signal processing.
- On page 173, the first diagram is incorect. The first C/D converter block should be a D/C converter block.
- On page 181, the cutoff frequency of $X_b(e^{j\omega})$ is written as ω_M . It should $N\omega_M$.
- On page 182, the output of the interpolator at the top of the page is written as $x_r(t)$. It should be $x_r[n]$.

Tutorial 9 (April 12 and 13)

• No known errors.

Tutorial 10 (April 26 and 27)

• No known errors.

Tutorial 11 (May 3 and 4)

• No known errors.

Tutorial 12 (May 10 and 11)

• No known errors.