

ERRATA & NOTES

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Differential Equations and Population Dynamics I: Introductory Approaches

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- p. 95 l-8, $N^n = N^{m_0}0$ should be $N^n = N^{m_0} = 0$
- p. 95 l-1, the expression

$$G_0(\lambda) = (\lambda - \lambda_0)^{n-1}I + (\lambda - \lambda_0)^{n-2} + \cdots + (\lambda - \lambda_0)^{n-2} + N^{n-1},$$

should be

$$G_0(\lambda) = (\lambda - \lambda_0)^{n-1}I + (\lambda - \lambda_0)^{n-2}N + \cdots + (\lambda - \lambda_0)N^{n-2} + N^{n-1},$$

- p. 96 l+11, $\binom{1}{n}$ should be $\binom{n}{1}$
- p. 101 l+8, in the Definition 3.16 the words “spectral radius” should not be there. Definition 3.16 is devoted to the spectral bound only. The spectral bound is equal to

$$s(A) = \max\{\operatorname{Re} \lambda : \lambda \in \sigma(A)\}.$$

For matrices (i.e. finite dimensional spaces) the spectral radius is equal to

$$r(A) = \{|\lambda| : \lambda \in \sigma(A)\}.$$

We hope everything will become clearer in the section 4.4.1 p.135 that should be moved before the section 3.6.1 p.100.

- p. 147 l.-6, for clarity: $C_n^k = \binom{n}{k} = \frac{n!}{k!(n-k)!}$.
- p. 267, in equation (8.42) $\int_0^\infty \beta(a)CI(\sigma, a)dad\sigma$ should be $\int_0^\infty \beta(a)CI(t, a)da$.
- p. 268, the page break should not be there.
- p. 458 “spectral radius” Definition 4.14 p.136.