

ERRATA: A CONCISE COURSE IN ALGEBRAIC TOPOLOGY

J.P. MAY

I thank Gaunce Lewis, Michael Spertus, and Anna Marie Bohmann for catching some of the following mistakes and misprints. I welcome further corrections and comments.

Page 6, line 13: to be the constant loop ... [add “be”]

Page 30, line 23: and, if we choose a basepoint u in U ... [delete “each”]

Page 49: locally finite is incorrectly defined: each $b \in B$ should have a neighborhood that intersects only finitely many $U \in \mathcal{O}$. This is needed for the continuity argument at the end of the proof of the Theorem stated on this page.

Page 76: The proof of the Theorem stated on this page is not correct unless A is path connected, and there is a misprint in the display four lines from the bottom. To fix both things, replace the cited display and the rest of the sentence in which it occurs with the following material:

$$X_0 = \Gamma A \vee \left(\bigvee_{(q,j)} S^q \right),$$

where $\{(q,j)\}$ runs over $q \geq 1$ and based maps $j : S^q \rightarrow X$ that represent generators of $\pi_q(X)$. Here the chosen basepoint is in ΓA . Construct $\gamma_0 : X_0 \rightarrow X$ using the maps j and the given map $\gamma : \Gamma A \rightarrow A$. Construct X_1 from X_0 by choosing a point in each non-basepoint component of ΓA and attaching intervals to connect the chosen points to the basepoint. Paths in X that connect the images of the chosen points under γ to the basepoint of X give $\gamma_1 : X_1 \rightarrow X$ extending γ_0 . From here, the construction continues exactly as in §5.

Page 77, line 1: Replace A and X by ΓA and ΓX .

Page 80, diagram: Replace the source and target of e by A and A' , respectively.

Page 86, line 15: Replace I_q by I^q .

Page 139, line -14: Replace $g : \mathbb{R}^m \rightarrow \mathbb{R}^n$ by $g : S^m \rightarrow S^n$

Page 154, line 7: u_i and u_j should be z_i and z_j

Page 157, line 8: $H_i(U_1 \cup \dots \cup U_q) = 0$

Page 159, line -9: Replace $H_0(\mathbb{R}^n)$ by $H_0(\mathbb{R}^n)$

Page 177: in the first diagram, the last map should be $(id \wedge \phi_{p,q})_*(t \wedge id)_*$ rather than $(id \wedge \phi_{p,q})_*(id \wedge t)_*$

Page 179, bottom right of diagram: Change $K(\pi_1, 3)$ to $K(\pi_2, 3)$

Page 188, bottom line: $z \in H_n(M; \mathbb{Z}_2)$

Page 194, line 21 $2n$ -plane in \mathbb{R}^∞

Page 207, line -4: $[X_+, BU(1)] \cong H^2(X; \mathbb{Z})$.

Page 210, line 3: Change $(1 + \xi_1) \cdots (1 + \xi_n)$ to $(1 + \xi_1 t) \cdots (1 + \xi_n t)$

Page 217, line -11: Replace $g^{-1}(E(\nu))$ with $g^{-1}(E(\gamma_q^r))$

Page 223, line 9: sq^I should be Sq^I

Page 228, fourth line of Definition: change $\sigma'_n \circ \Sigma T_n$ to $\sigma'_n \circ \Sigma f_n$

Page 238, line -4: change §16 to §17