changes from version 66 to 67:

p.2 Reference: added Zeeman

p.6 above (2b) added remark about which f work: “by the methods of this course...”

p.6 (2b) slightly edited the sentence after “smooth structure”.

p.2 (2b) fixed footnote about definition of embedding

p.6 added a short paragraph to explain more details about the torus as an abstract surface, mentioning the equivalence relation.

p.7 mentioned that RP^2 is sometimes called real projective plane

p.9 mentioned that CP^1 is sometimes called complex projective line

p.9 surfaces cut out by one equation: added comment “by the methods of this course...”

p.11 “Consider the holomorphic map \varphi:...” should be z to z, not w to w^2.

p.12 added Remark in the second-last bullet point of Sec.1.2 (that S can be idenfied with C)

p.12 added comment to explain why Dx{1} is open in the quotient.

p.17 torus as a Riem surface: fixed definition of epsilon

p.17 at the end of Section 2: added “It is perhaps easier to think of all this...”

p.20 improved proof that tilde{f} is periodic, as shown in class. New paragraph starts with “Trick to show that tilde(f) is Lambda-periodic...”

p.20 above Corollary added the comment “Conversely, if \tau’=...”

p.29 improved proof of Theorem 6.2 and added an alternative proof discussed in class

p.30 typo in the proof above Lemma 6.5: det (DFi^{-1} DG)

p.30 improved explanation of the proof of Lemma 6.5

p.32 them 7.3 added final comment “where the remaining variables...”

p.33 added example (7) discussed in class

p.39 Sec.9.5 recalled the definition of cross-product, which before was a footnote in Sec.10.6

p.42 parametrisation by arc-length, use [a,b] instead of [0,b].

p.42 recalled what gamma_loc is, above thm 10.3

p.43 restated exercise as a remark

p.43 Example, spelt out what gamma_loc' is

p.44 added above the Example: "since any tangent vector arises as… for some curve as above"

p.54 Lemma 12.6 proof mentioned it follows from Cor 12.2

p.56 Thm 12.8 replaced II = S =… by S=… since the II may be confusing

p.64 Sec.14.1 emphasized in bold that gamma is parametrised by arc length

p.65 Cor.14.3 boxed the first statement

p.67 under Thm 14.5 added Remark, mentioned in class

p.76 Sec.16.2 cleaned up the section, emphasizing speed parametrisation issues

p.93 and 94 cleaned up the two boxes, and explained the rescaling of numerator and denominator for point (6) in the proof.

p.97 after Playfair, added "with \ell and satisfying"

p.98 above Lemma 21.10 explained the letters

p.99 above Lemma 21.11 recalled Euclidean sine rule