GWAS: Name _____

1. Formatting:

      all margins 2.5cm   informative title

      12 pt size   name on all pages

      no raw R code or output   all pages numbered

      max <mark>10</mark> pages   no blurry plots (**NOT png**)

2. Introduction/Background:

      brief statement of scientific question

      all variables defined

3. PCA:

      explain relation between PCs and population stratification

      plot pc2 (y-axis) vs pc1 (x-axis)

4. Pre-processing / QC steps:

      SNP QC: criteria and reasons

      sample QC: criteria and reasons

      Hardy-Weinberg equilibrium: what it means and <u>how it relates to quality</u>

      Overall QC explanation

5. Association / post-association analysis:

      Describe association analysis in words and mathematically

      Manhattan plot

      lambda analysis (including **<u>SQUARE</u>** QQ-normal plots)

      LD heatmap (optional – does NOT count); measure of LD

6. Write out final estimated model **mathematically (**for a given SNP)

hat on response variable   <u>MUST RELATE TO SNP</u>

7. Plots:

label size (not too small)   captions

placement   **NOT BLURRY**

8. Conclusions

recap analysis   state main findings

9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor   satisfactory   good   excellent

10. Other comments:

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