## PMath 940 <u>Topics in Number Theory: Elliptic Curves</u> J. X. H. Wang

## **List of Topics**

- 1. Weierstrass form
- 2. Isogenies and dual isogenies
- 3. Differential forms
- 4. Elliptic curves over C and F\_p
- 5. Formal groups
- 6. Elliptic curves over local fields
- 7. Elliptic curves over global fields (Mordell-Weil)
- 8. Arithmetic statistics