

Remember, everything on the lecture slides and the accompanying notes is potentially examinable!

FRST302: Forest Genetics

Lecture 1.1: Classical Genetics and its Molecular Mechanisms

What are the major genetic questions in biology?

The answer to this question totally depends on your perspective. However, I think that it is more than fair to say that the following questions are at the heart of most biological science:

- Why is there so much variation among individuals?
- How is this variation maintained in populations?
- Why do offspring tend to resemble their parents?

Outline for Today

- Basic definitions in genetics
- Principles and terms in classical genetics
- Molecular mechanisms of classical genetics
- Recombination and its significance

Learning Outcomes

- *Basic definitions in genetics*
- *Principles and terms in classical genetics*
- *Molecular mechanisms of classical genetics*
- *Chromosome crossover and its significance*