Bishop Heber High School

Subject	Year	Term
Further Maths	13	3

Topic

Differential Equations, Recurrence Relations

Content (Intent)

Prior Learning (Topic) Further Calculus, Transportation & Allocation Problems, Flows in Networks, Dynamic Programming, Decision Analysis

- Solving & interpreting differential equations
- Analyse strategies in Game Theory
- Solving & interpreting recurrence relations

Future Learning (Topic) N/A

What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)
• Solve differential equations linked to various contexts, including simple harmonic motion, and damped oscillations. • Solve second order recurrence relations and apply solutions to problems in context. • Revision & exam prep core maths	**A Level Exams 9FM0/01, 9FM0/02** Formal Homework (Pure Maths & Decision Maths) Ongoing self-assessment
Study leave	**A Level Exams 9FM0/3D, 9FM0/4D**

How can parents help at home?

Check assessment record in formal assessed homework books.
Encourage use of MyMaths.

Helpful further reading/discussion (including Reading and Vocabulary Lists)

Textbooks (ISBN):
Core Pure Mathematics Book 2: 9781292183343
Decision Mathematics 1: 9781292183299
Decision Mathematics 2: 9781292183305
Website: https://qualifications.pearson.com

Vocabulary Lists

Homogeneous
Auxiliary Function
Non-homogeneous
Complementary Function
Oscillations
Particular Integral
Damping
Harmonic
Period