

**St. Francis Xavier's College**  
**2017/2018**  
**Mathematics (Core)**  
**Course Outline**

**Level: F.5**  
**Term: 1**

	Topics / Main Theme
1	Variations (Ch.7)
2	Basic Properties of Circles(I) (Ch. 11)
3	Basic Properties of Circles(II) (Ch. 12)
4	Applications of Trigonometry in 2-D problems (Ch. 2)
5	Locus (Ch. 3)
	Equations of Circles (Ch. 4)

Modes of Assessment and weighting:

Modes	Regular Tests	Designated Assignments	Performance in lessons	Examination
Weights	10%	-	-	90%

**Term: 2**

	Topics / Main Theme
1	Permutation and Combination (Ch. 5)
2	More about Probability (Ch. 6)
3	More about Inequalities (Ch. 1)
4	Linear Programming (Ch. 8)
5	More about Graphs of Functions (Ch. 9)

Modes of Assessment and weighting:

Modes	Regular Tests	Designated Assignments	Performance in lessons	Examination
Weights	10%	-	-	90%

**St. Francis Xavier's College**  
**2017/2018**  
**Mathematics (M1)**  
**Course Outline**

**Level: F.5**  
**Term: 1**

	Topics / Main Theme
1	Arithmetic Sequences (Core Math)
2	Geometric Sequences (Core Math)
3	Permutation and Combination (Core Math)
4	More about Probability (Core Math)
5	Further Probability (Ch. 9)

Modes of Assessment and weighting:

Modes	Regular Tests	Designated Assignments	Performance in lessons	Examination
Weights	10%	-	-	90%

**Term: 2**

	Topics / Main Theme
1	Probability Distribution, Expectation and Variance (Ch. 10)
2	Discrete Probability Distribution (Ch. 11)
3	Continuous Random Variable and Normal Distribution (Ch. 12)
4	Sampling Distribution and Parameter Estimation (Ch. 13)

Modes of Assessment and weighting:

Modes	Regular Tests	Designated Assignments	Performance in lessons	Examination
Weights	10%	-	-	90%

**St. Francis Xavier's College**  
**2017/2018**  
**Mathematics (M2)**  
**Course Outline**

**Level: F.5**

**Term: 1**

	Topics / Main Theme
1	Indefinite Integration and its applications (Ch. 9)
2	Definite Integration (Ch. 10)

Modes of Assessment and weighting:

Modes	Regular Tests	Designated Assignments	Performance in lessons	Examination
Weights	10%	-	-	90%

**Term: 2**

	Topics / Main Theme
1	Applications of Definite Integration (Ch. 11)
2	Matrices and Determinants (Ch. 12)
3	System of Linear Equations (Ch. 13)

Modes of Assessment and weighting:

Modes	Regular Tests	Designated Assignments	Performance in lessons	Examination
Weights	10%	-	-	90%