

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

Level: F.4

Term: 1

| | Topics / Main Theme |
|----|---|
| 1. | Number Systems (Ch.1) |
| 2. | Equations of Straight Lines (Ch.6) |
| 3. | Quadratic Equations in One Unknown (Ch.2) |
| 4. | Introduction to Functions (Ch.3) |
| 5. | Graphs of Quadratic Functions and their Applications (Ch.4) |
| 6. | More about Polynomials (Ch.5) |

Modes of Assessment and weighting:

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

Term: 2

| | Topics / Main Theme |
|----|---------------------------------|
| 1. | Exponential Functions (Ch.7) |
| 2. | Logarithmic Functions (Ch.8) |
| 3. | More about Equations (Ch.9) |
| 4. | Trigonometric Functions (Ch.10) |

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.4
Term: 1

| | Topics / Main Theme |
|---|---|
| 1 | The Binomial Expansion (Ch. 1) |
| 2 | Exponential Functions (Core Math) |
| 3 | Logarithmic Functions (Core Math) |
| 4 | Exponential Functions and Logarithmic Functions (Ch. 2) |
| 5 | Limits and derivatives (Ch. 3) |

Modes of Assessment and weighting:

| Modes | Regular Tests | Designated Assignments | Performance in lessons | Examination |
|---------|---------------|------------------------|------------------------|-------------|
| Weights | 10% | - | 10% (Quiz) | 80% |

Term: 2

| | Topics / Main Theme |
|---|---|
| 1 | Differentiation (Ch. 4) |
| 2 | Application of Differentiation (Ch. 5) |
| 3 | Indefinite Integrals and its Applications (Ch. 6) |
| 4 | Definite Integrals (Ch. 7) |
| 5 | Application of Definite Integrals (Ch. 8) |

Modes of Assessment and weighting:

| Modes | Regular Tests | Designated Assignments | Performance in lessons | Examination |
|---------|---------------|------------------------|------------------------|-------------|
| Weights | 10% | - | 10% (Quiz) | 80% |

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

Level: F.4
Term: 1

| | Topics / Main Theme |
|---|--|
| 1 | Surds and Rationalization of Denominators (Ch.1) |
| 2 | Mathematical Induction (Ch.2) |
| 3 | Binomial Theorem (Ch.3) |
| 4 | Trigonometry (I) (Ch.4) |
| 5 | Trigonometry (II) (Ch.5) |
| 6 | Limits and the Number e (Ch.6) |
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Modes of Assessment and weighting:

| Modes | Regular Tests | Designated Assignments | Performance in lessons | Examination |
|---------|---------------|------------------------|------------------------|-------------|
| Weights | 10% | - | 10% (Quiz) | 80% |

Term: 2

| | Topics / Main Theme |
|---|--|
| 1 | Differentiation (Ch.7) |
| 2 | Applications of Differentiation (Ch.8) |
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Modes of Assessment and weighting:

| Modes | Regular Tests | Designated Assignments | Performance in lessons | Examination |
|---------|---------------|------------------------|------------------------|-------------|
| Weights | 10% | - | 10% (Quiz) | 80% |