

COMPREHENSIVE SYLLABUS REVISION

DEPARTMENT: MATHEMATICS

YEAR OF IMPLEMENTATION: 2012

| Sem | Course Code | Name of the Course | OLD/ NEW | % of Modifi cation | NET- Yes/N o | %of Inclusio n | Skill Developm ent | Entrepren eurship | Employab ility |
|-----------|-------------|---|-------------|--------------------------|--------------------|----------------------|--------------------------|----------------------|-------------------|
| UG | | | | | | | | | |
| I | MT 1100 | Mathematics for Physics | old | 0% | No | 0% | ✓ | | |
| I | MT 1101 | Mathematics for Statistics | New | 0% | No | 100% | ✓ | | |
| I | MT 1502 | Algebra and Calculus I | old | 40% | No | 20% | ✓ | | |
| I | MT 1503 | Analytical Geo. of 2D, Trigonometry & Matrices | old | 80% | No | 0% | ✓ | ✓ | ✓ |
| II | MT 2102 | Mathematics for Chemistry | old | 0% | No | 0% | ✓ | | |
| II | MT 2502 | Algebra and Calculus II | old | 40% | No | 0% | ✓ | | |
| II | MT 2503 | Analytical Geo. of 3D, Fourier Series & Num. Theory | old | 60% | No | 0% | ✓ | ✓ | ✓ |
| III | MT 3206 | Advanced Mathematics for Physics | old | 0% | No | 0% | ✓ | | |
| | | . | | | | | | | |
| III | MT 3205 | Business Mathematics | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| III | MT 3300 | Popular Astronomy | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| III | MT 3503 | Vector Analysis and ODE | old | 20% | Yes | 10% | ✓ | | ✓ |
| III | MT 3504 | Integral Transforms and Partial Diff. | old | 50% | Yes | 40% | ✓ | ✓ | ✓ |
| IV | MT 4204 | Advanced Mathematics for Chemistry | old | 0% | No | 0% | ✓ | | |
| IV | MT 4206 | Numerical Methods using C | New | 0% | No | 100% | ✓ | | ✓ |
| IV | MT 4301 | Mathematics for Competitive Examinations | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| IV | MT 4301 | Mathematics for Competitive Examinations | old | 0% | Yes | 0% | ✓ | ✓ | ✓ |
| IV | MT 4503 | Algebraic Structure I | old | 10% | No | 0% | ✓ | ✓ | ✓ |
| IV | MT 4504 | Computer Programming in C | old | 0% | No | 0% | ✓ | | ✓ |
| V | MT 5406 | Combinatorics | old | 30% | No | 40% | ✓ | ✓ | ✓ |
| V | MT 5407 | Formal Languages and Automata | old | 30% | No | 40% | ✓ | ✓ | ✓ |
| | | | | | | | | | |
| V | MT 5408 | Graph Theory | old | 0% | No | 0% | ✓ | | |
| V | MT 5409 | Numerical Methods | old | 0% | Yes | 0% | ✓ | | ✓ |

Dr. M.A. BASKER

Head & Associate Professor

PG & Research Dept. of Mathematics

Loyola College, Chennai - 600 034.

| | | | | | | | | | |
|-----------|---------|---|-----|-----|-----|------|---|---|---|
| V | MT 5505 | Real Analysis | old | 20% | Yes | 0% | ✓ | | ✓ |
| V | MT 5507 | Operations Research | old | 0% | Yes | 0% | ✓ | ✓ | ✓ |
| V | MT 5509 | Algebraic Structure II | old | 0% | Yes | 0% | ✓ | | ✓ |
| V | MT 5510 | Statics | old | 50% | No | 0% | ✓ | ✓ | ✓ |
| VI | MT 6606 | Complex Analysis | old | 20% | Yes | 0% | ✓ | ✓ | ✓ |
| VI | MT 6607 | Dynamics | old | 50% | No | 0% | ✓ | ✓ | ✓ |
| VI | MT 6608 | Discrete Mathematics | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| VI | MT 6653 | Astronomy | old | 0% | No | 20% | ✓ | ✓ | ✓ |
| VI | MT 6653 | Data Structures and Algorithms | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| VI | MT 6653 | Projects | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| PG | | | | | | | | | |
| I | MT 1810 | Linear Algebra | old | 0% | Yes | 0% | ✓ | | ✓ |
| I | MT 1811 | Real Analysis | old | 30% | Yes | 40% | ✓ | ✓ | ✓ |
| I | MT 1812 | Ordinary Differential Equations | old | 0% | Yes | 10% | ✓ | ✓ | ✓ |
| I | MT 1813 | Differential Geometry | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| I | MT 1815 | Probability Theory and Stochastic Process | New | 0% | Yes | 100% | ✓ | ✓ | ✓ |
| II | MT 2810 | Algebra | old | 20% | Yes | 0% | ✓ | | ✓ |
| II | MT 2811 | Measure Theory and Integration | old | 0% | Yes | 10% | ✓ | ✓ | ✓ |
| II | MT 2812 | Partial Differential Equations | old | 20% | Yes | 40% | ✓ | ✓ | ✓ |
| II | MT 2814 | Complex Analysis | old | 10% | Yes | 0% | ✓ | ✓ | ✓ |
| II | MT 2962 | Actuarial Mathematics | New | 0% | No | 100% | ✓ | ✓ | ✓ |
| II | MT 2963 | MATLAB Programming | New | 0% | No | 100% | ✓ | ✓ | ✓ |
| III | MT 3810 | Topology | old | 0% | Yes | 0% | ✓ | | ✓ |
| III | MT 3812 | Classical Mechanics | old | 0% | Yes | 0% | ✓ | ✓ | ✓ |
| III | MT 3813 | Operations Research | old | 20% | Yes | 20% | ✓ | ✓ | ✓ |
| III | MT 3875 | Mathematical Finance Models | New | 0% | No | 100% | ✓ | ✓ | ✓ |

Signature

Dr. M.A. BASKER
 Head & Associate Professor
 PG & Research Dept. of Mathematics
 Loyola College, Chennai - 600 034.

| | | | | | | | | | |
|-----|---------|-------------------------------|-----|-----|-----|------|---|---|---|
| III | MT 3964 | Formal Languages and Automata | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| III | MT 3965 | Numerical Analysis | New | 0% | No | 100% | ✓ | ✓ | ✓ |
| | | | | | | | | | |
| IV | MT 4810 | Functional Analysis | old | 0% | Yes | 0% | ✓ | | ✓ |
| IV | MT 4814 | Project | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| IV | MT 4815 | Advanced Graph Theory | New | 0% | No | 100% | ✓ | ✓ | ✓ |
| IV | MT 4816 | Fluid Dynamics | old | 30% | No | 20% | ✓ | ✓ | ✓ |
| IV | MT 4817 | Fuzzy Sets and Applications | old | 0% | No | 40% | ✓ | ✓ | ✓ |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |


Dr. M.A. BASKER
 Head & Associate Professor
 PG & Research Dept. of Mathematics
 Loyola College, Chennai - 600 034.

COMPREHENSIVE SYLLABUS REVISION

DEPARTMENT: MATHEMATICS

YEAR OF IMPLEMENTATION: 2016

| Sem | Course Code | Name of the Course | OLD/ NEW | % of Modifi cation | NET- Yes/N o | %of Inclusio n | Skill Developm ent | Entrepren eurship | Employab ility |
|-----------|-------------|--|-------------|--------------------------|--------------------|----------------------|--------------------------|----------------------|-------------------|
| UG | | | | | | | | | |
| I | 16UMT1AL01 | Mathematics for Physics -I | old | 10% | No | 20% | ✓ | | |
| I | 16UMT1AL02 | Mathematics for Statistics -I | old | 10% | No | 40% | ✓ | | |
| I | 16UMT1MC01 | Algebra and Calculus I | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| I | 16UMT1MC02 | Analytical Geo. of 2D, Trig. Matrices | old | 0% | No | 0% | ✓ | | |
| I | 16UMT1AL03 | Mathematics for Chemistry -I | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| II | 16UMT2MC01 | Algebra and Calculus II | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| II | 16UMT2MC02 | Analytical Geo. of 3D, Fourier Series, Num. Theory | old | 0% | No | 0% | ✓ | | |
| II | 16UMT2AL01 | Mathematics for Physics -II | old | 10% | No | 0% | ✓ | | |
| II | 16UMT2AL02 | Mathematics for Statistics -II | New | 0% | No | 100% | ✓ | | |
| III | 16UMT3AL01 | Business Mathematical Techniques | old | 20% | No | 60% | ✓ | ✓ | ✓ |
| III | 16UMT3MC02 | Vector Analysis and ODE | old | 20% | Yes | 10% | ✓ | | ✓ |
| III | 16UMT3MC01 | Integral Transforms and Partial Diff. | old | 50% | Yes | 40% | ✓ | ✓ | ✓ |
| II | 16UMT2AL03 | Mathematics for Chemistry -II | old | 10% | No | 0% | ✓ | | |
| IV | 16UMT4MC01 | Abstract Algebra | old | 10% | Yes | 0% | ✓ | | |
| IV | 16UMT4ES01 | Combinatorics | old | 40% | No | 0% | ✓ | | |
| IV | 16UMT4ES02 | Fuzzy Sets and Applications | New | 0% | No | 100% | ✓ | | |

Dr. M.A. BASKER

Head & Associate Professor
PG & Research Dept. of Mathematics
Loyola College, Chennai - 600 034.

| | | | | | | | | | |
|-----------|------------|---|-----|-----|-----|------|---|---|---|
| VI | 16UMT6MC04 | Graph Theory | old | 20% | No | 10% | ✓ | ✓ | ✓ |
| V | 16UMT5SK01 | Numerical Methods using C | old | 0% | Yes | 0% | ✓ | | ✓ |
| V | 16UMT5SK02 | Numerical Methods using C - Lab | New | 0% | No | 100% | ✓ | | ✓ |
| V | 16UMT5MC01 | Real Analysis | old | 30% | Yes | 0% | ✓ | | ✓ |
| VI | 16UMT6MS01 | Operations Research | old | 0% | Yes | 10% | ✓ | ✓ | ✓ |
| V | 16UMT5MC03 | Linear Algebra | old | 10% | Yes | 10% | ✓ | | ✓ |
| V | 16UMT5MC02 | Statics | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| VI | 16UMT6MC01 | Complex Analysis | old | 10% | Yes | 0% | ✓ | ✓ | ✓ |
| VI | 16UMT6MC02 | Dynamics | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| VI | 16UMT6MC03 | Discrete Mathematics | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| V | 16UMT5ES02 | Astronomy | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| V | 16UMT5ES01 | Data Structures | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| VI | 16UMT6TP01 | Projects | | | | | | | |
| PG | | | | | | | | | |
| I | 16PMT1MC01 | Linear Algebra | old | 0% | Yes | 0% | ✓ | | ✓ |
| I | 16PMT1MC02 | Real Analysis | old | 20% | Yes | 10% | ✓ | ✓ | ✓ |
| I | 16PMT1MC03 | Ordinary Differential Equations | old | 10% | Yes | 0% | ✓ | ✓ | ✓ |
| III | 16PMT3ES02 | Differential Geometry | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| I | 16PMT1MC05 | Probability Theory and Stochastic Process | old | 20% | Yes | 20% | ✓ | ✓ | ✓ |
| I | 16PMT1MC04 | Computer Algorithms | New | 0% | No | 100% | | | |
| II | 16PMT2MC01 | Algebra | old | 0% | Yes | 0% | ✓ | | ✓ |
| II | 16PMT2MC02 | Measure Theory and Integration | old | 0% | Yes | 0% | ✓ | ✓ | ✓ |
| II | 16PMT2MC03 | Partial Differential Equations | old | 20% | Yes | 20% | ✓ | ✓ | ✓ |
| II | 16PMT2MC04 | Complex Analysis | old | 0% | Yes | 0% | ✓ | ✓ | ✓ |
| | | | | | | | | | |
| | | | | | | | | | |
| II | 16PMT2ES02 | Number Theory and Cryptography | New | 0% | No | 100% | ✓ | ✓ | ✓ |
| III | 16PMT3MC01 | Topology | old | 0% | Yes | 0% | ✓ | | ✓ |
| IV | 16PMT4MC05 | Classical Mechanics | old | 0% | Yes | 0% | ✓ | ✓ | ✓ |

Loyola

Dr. M.A. BASKER
Head & Associate Professor
PG & Research Dept. of Mathematics
Loyola College, Chennai - 600 034.

| | | | | | | | | | |
|-----|------------|---|-----|-----|-----|------|---|---|---|
| III | 16PMT3MC03 | Operations Research | old | 10% | Yes | 60% | ✓ | ✓ | ✓ |
| II | 16PMT2ES01 | Formal Languages and Automata | old | 10% | No | 0% | ✓ | ✓ | ✓ |
| III | 16PMT3MC04 | Algorithmic Graph Theory | New | 0% | No | 100% | ✓ | ✓ | ✓ |
| III | 16PMT3ID01 | Mathematical Computing using R and MATLAB | New | 0% | No | 100% | ✓ | ✓ | ✓ |
| III | 16PMT3ID02 | Mathematical Computing using R and MATLAB - Lab | New | 0% | No | 100% | ✓ | ✓ | ✓ |
| III | 16PMT3ES01 | Combinatorics | old | 0% | Yes | 0% | ✓ | | ✓ |
| IV | 16PMT4MC01 | Functional Analysis | old | 0% | No | 0% | ✓ | ✓ | ✓ |
| IV | 16PMT4PJ01 | Project | | | | | | | |
| III | 16PMT3MC02 | Fuzzy Sets and Applications | old | 10% | No | 10% | ✓ | ✓ | ✓ |
| IV | 16PMT4MC02 | Numerical Methods using C++ | New | 0% | No | 100% | ✓ | ✓ | ✓ |
| IV | 16PMT4MC03 | Numerical Methods using C++ - Lab | New | 0% | No | 100% | ✓ | ✓ | ✓ |
| IV | 16PMT4MC04 | Calculus of Variations and Integral Equations | New | 0% | Yes | 100% | ✓ | ✓ | ✓ |


Dr. M.A. BASKER
 Head & Associate Professor
 PG & Research Dept. of Mathematics
 Loyola College, Chennai - 600 034.