

THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS), Sivakasi

(Affiliated to Madurai Kamaraj University, Reaccredited with "A" Grade by NAAC, College with Potential for Excellence by UGC & Mentor Institution under UGC PARAMARSH)

NAAC SSR Cycle IV (2015-2020)

1.1. CURRICULUM DESIGN AND DEVELOPMENT

1.1.2. REVISION OF SYLLABUS

PERCENTAGE OF SYLLABUS REVISION 2020 AND LATER



(Affiliated to Madurai Kamaraj University, Re-accredited with A Grade by NAAC, College with Potential for Excellence by UGC and Mentor Institution under UGC PARAMARSH)

DEPARTMENT OF PHYSICS PERCENTAGE OF SYLLABUS REVISION M.SC PHYSICS 2020 AND LATER

THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS), SIVAKASI.

DEPARTMENT OF PHYSICS
M. SC PHYSICS – PROGRAMME CODE: MDPH

(For those who have joined in June 2020 and later)

Total Number of Courses having changes :14

Total Number of Courses

:24

Percentage of Revision

:58.33%

Signature of the HOD with Seal

Dr.(Mrs) S.SIVA DEVI HOD of Physics The S.F.R.College for Women SIVAKASI - 626 123.

Dr. T. Palaneeswari
PRINCIPAL
The Standard Firework
Rajaratnam College
for Women,
SIVAKASI.



(Affiliated to Madurai Kamaraj University, Re-accredited with A Grade by NAAC, College with Potential for Excellence by UGC and Mentor Institution under UGC PARAMARSH)

DEPARTMENT OF PHYSICS

PERCENTAGE OF SYLLABUS REVISION

M.SC PHYSICS

2020 AND LATER

THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),

SIVAKASI.

DEPARTMENT OF PHYSICS

M. SC PHYSICS – PROGRAMME CODE: MDPH

(For those who have joined in June 2020 and later)

| S. No | Course Code | Course Title |
|-------|-------------|-------------------------------------|
| 1. | MDPH12 | Classical and Statistical Mechanics |
| 2. | MDPH1L | Advanced Physics Lab – I |
| 3. | MDPH1E1 | Solar Energy and its Applications |
| 4. | MDPH21 | Quantum Mechanics – I |
| 5. | MDPH2L | Advanced Physics Lab – II |
| 6. | MDPH31 | Solid State Physics – I |
| 7. | MDPH32 | Quantum Mechanics – II |
| 8. | MDPH33 | Computational Physics |
| 9. | MDPH3L | Advanced Physics Lab – III |
| 10. | MDPH3E1 | Materials Science and IPR |
| 11. | MDPH41 | Solid State Physics – II |
| 12. | MDPH42 | Nuclear and Particle Physics |
| 13. | MDPH43 | Molecular Spectroscopy |
| 14. | MDPH4E1 | Nano Physics |

2

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DEPARTMENT OF PHYSICS

PERCENTAGE OF SYLLABUS REVISION

M.SC PHYSICS

2020 AND LATER

THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS), SIVAKASI

DEPARTMENT OF PHYSICS

M.Sc. Physics

(For those who have joined in 2020 and later)

OUTCOME BASED EDUCATION WITH CHOICE BASED CREDIT SYSTEM

PROGRAMME CODE – MDPH

PROGRAMME SCHEME

| - | | | Teaching | · · | | | ks Allo | otted |
|----------|---------------------|---------------------------------------------------------------------------|----------------------|---------|--------------------------------|----------|----------|-------|
| Semester | Course Code | Course Title | Hours Per Week | Credits | Duration of Exam (Hours) | Internal | External | Total |
| | MDPH11 | Core Courses Mathematical Physics – I | 6 | 5 | 3 | 40 | 60 | 100 |
| | MDPH12 | Classical and Statistical Mechanics | 6 | 4 | 3 | 40 | 60 | 100 |
| 1 | MDPH13 | Linear Integrated Circuits | 6 | 4 | 3 | 40 | 60 | 100 |
| | MDPH1L | Advanced Physics Lab – I | 6 | 4 | 5 | 50 | 50 | 100 |
| | MDPH1E1/ MDPH1E2 | Elective Course I Solar Energy and its applications/ Digital Logic Design | 6 | 5 | 3 | 40 | 60 | 100 |
| | | Total | 30 | 22 | | | | 500 |
| Field | visit mandatory | y for the course MDPH13 - Linear Integr | rated Circuits | 3 | | | | |
| | MDPH21 | Core Courses Mathematical Physics – II | 6 | 5 | 3 | 40 | 60 | 100 |
| | MDPH22 | Quantum Mechanics – I | 6 | 4 | 3 | 40 | 60 | 100 |
| 11 | MDPH23 | Electromagnetic Theory | 6 | 4 | 3 | 40 | 60 | 100 |
| | MDPH2L | Advanced Physics Lab – II | 6 | 4 | 5 | 50 | 50 | 100 |
| | MD2E | Elective Course II (Offered by other Departments) | 6 | 5 | 3 | 40 | 60 | 100 |
| | | Total | 30 | 22 | | | | 500 |
| | MDPH31 | Core Courses Solid State Physics –I | 6 | 5 | 3 | 40 | 60 | 100 |
| | MDPH32 | Quantum Mechanics – II | 6 | 4 | 3 | 40 | 60 | 100 |
| 1111 | MDPH33 | Computational Physics and Microprocessor | 6 | 4 | 3 | 40 | 60 | 100 |
| 1 | MDPH3L | Advanced Physics Lab – III | 6 | 4 | 5 | 50 | 50 | 100 |
| | MDPH3E1/ | Elective Course III Materials Science and IPR/ | 6 | 5 | 3 | 40 | 60 | 100 |
| | | Total | 30 | 22 | | | | 500 |
| Field | visit mandator | y for the course MDPH3E1- Materials S | cience and I | PR | - | | | |
| | MDPH41 | Core Courses Solid State Physics –II | 6 | 5 | 3 | 40 | 60 | 100 |
| | MDPH42 | Nuclear and Particle Physics | 6 | 5 | 3 | 40 | 60 | 100 |
| IV | MDPH43 | Molecular Spectroscopy | 6 | 4 | 3 | 40 | 60 | 100 |
| | MDPH4E1/ | Elective Course IV Nano Physics / | 6 | 5 | 3 | 40 | 60 | 100 |
| | MDPH4E2 | Medical Physics | | | | | | |
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Dr.(Wrs) S.SIVA DEVI HOD of Physics
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DEPARTMENT OF PHYSICS PERCENTAGE OF SYLLABUS REVISION

M.SC PHYSICS

2020 AND LATER

| , | | | | | | | | | |
|---|--------|-----------------------|-------|----|----|---|---|-----|-----|
| ` | MDPH4P | Project and viva voce | | 6 | 5 | - | - | 100 | 100 |
| | | | Total | 30 | 24 | | | | 500 |

ELECTIVE COURSE OFFERED FOR OTHER MAJOR STUDENTS

| Semester | Course Code | Course Title | Teaching Hours Per Week | Credits | Duration of Exam (Hours) | Internal Mar | External Say | Total |
|----------|---------------------|----------------------------------|----------------------------------|---------|--------------------------------|--------------|--------------|-------|
| п | MDPH2E1/ MDPH2E2 | Applied Physics/ Microcontroller | 6 | 5 | 3 | 40 | 60 | 100 |

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NAAC SSR Cycle IV (2015-2020)

1.1. CURRICULUM DESIGN AND DEVELOPMENT

1.1.2. REVISION OF SYLLABUS

PERCENTAGE OF SYLLABUS REVISION 2017 AND LATER



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DEPARTMENT OF PHYSICS PERCENTAGE OF SYLLABUS REVISION

M.SC PHYSICS 2017 AND LATER

THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS), SIVAKASI.

DEPARTMENT OF PHYSICS M. SC PHYSICS – PROGRAMME CODE: HLPH

(For those who have joined in June 2017 and later)

Total Number of Courses having changes :4

Total Number of Courses :24

Percentage of Revision :16.67%

Signature of the HOD with Seal

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DEPARTMENT OF PHYSICS PERCENTAGE OF SYLLABUS REVISION

M.SC PHYSICS

2017 AND LATER

THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS), SIVAKASI.

DEPARTMENT OF PHYSICS

M. SC PHYSICS - PROGRAMME CODE: HLPH

(For those who have joined in June 2017 and later)

| Course Code | Course Title |
|-------------|-------------------------------------|
| | Core Courses |
| HLPH11 | Mathematical Physics – I |
| ·HLPH12 | Classical and Statistical Mechanics |
| HLPH22 | Mathematical Physics - II |
| HLPH33 | Computer Oriented Numerical Methods |

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DEPARTMENT OF PHYSICS PERCENTAGE OF SYLLABUS REVISION

M.SC PHYSICS

2017 AND LATER

THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS), SIVAKASI
DEPARTMENT OF PHYSICS
M.Sc. Physics
(For those who have joined in 2017 and later)
CHOICE BASED CREDIT SYSTEM
PROGRAMME CODE – HLPH
PROGRAMME SCHEME

| ter | | | Teaching | 10 | _ | Ma | rks All | otted |
|----------|---------------------|--------------------------------------------------------------------------------------------|----------------------|-----------|--------------------------------|----------|----------|-------|
| Semester | Course Code | Course Title | Hours Per Week | Credits | Duration of Exam (Hours) | Internal | External | Total |
| | HLPH11 | Core Courses Mathematical Physics – I | 6 | 5 | 3 | 25 | 75 | 100 |
| | HLPH12 | Classical and Statistical Mechanics | 6 | 4 | 3 | 25 | 75 | 100 |
| ı | HLPH13 | Linear Integrated Circuits | 6 | 4 | 3 | 25 | 75 | 100 |
| | HLPH1L | Lab - I | 6 | 4 | 5 | 40 | 60 | 100 |
| | HLPH1E1/ HLPH1E2 | Elective Course I Microprocessors / Digital Logic Design | 6 | 5 | 3 | 25 | 75 | 100 |
| | | Total | 30 | 22 | | | | 500 |
| | HLPH21 | Core Courses Quantum Mechanics – I | 6 | 5 | 3 | 25 | 75 | 100 |
| | HLPH22 | Mathematical Physics - II | 6 | 4 | 3 | 25 | 75 | 100 |
| II | HLPH23 | Electromagnetic Theory | 6 | 4 | 3 | 25 | 75 | 100 |
| | HLPH2L | Lab – II | 6 | 4 | 5 | 40 | 60 | 100 |
| | HLPH2E1/ HLPH2E2 | Elective Course II Applied Physics/ Microcontroller | 6 | 5 . | 3 | 25 | 75 | 100 |
| | | Total | 30 | 22 | | | | 500 |
| | HLPH31 | Core Courses Solid State Physics –I | 6 | 5 | 3 | 25 | 75 | 100 |
| | HLPH32 | Quantum Mechanics – II | 6 | 4 | 3 | 25 | 75 | 100 |
| | HLPH33 | Computer Oriented Numerical Methods | 6 | 4 | 3 | 25 | 75 | 100 |
| Ш | HLPH3L | Lab – III | 6 | 4 | 5 | 40 | 60 | 100 |
| | HLPH3E1/ HLPH3E2 | Elective Course III CSIR UGC - NET Preparatory course - Physics / Recent Trends in Physics | 6 | 5 | 3 | 25 | 75 | 100 |
| | • | Total | 30 | 22 | | | | 500 |
| | HLPH41 | Core Courses Solid State Physics –II | 6 | 5 | 3 | 25 | 75 | 100 |
| | HLPH42 | Nuclear Physics | 6 | 5 | 3 | 25 | 75 | 100 |
| IV | HLPH43 | Molecular Spectroscopy | 6 | 4 | 3 | 25 | 75 | 100 |
| • | HLPH4E1/ HLPH4E2 | Elective Course IV Nano Physics / Medical Physics | 6 | 5 | 3 | 25 | 75 | 100 |
| | HLPH4P | Project and viva voce | 6 | 5 | - | - | 100 | 100 |
| | | Total | 30 | 24 | | | | 500 |

0, Dr.(Mrs) S.SIVA DEVI HOD of Physics The S.F.R.College for Women SIVAKASI - 626 123.

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PRINCIPAL The Standard Fireworks Rajaratnam College for Women,



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DEPARTMENT OF PHYSICS PERCENTAGE OF SYLLABUS REVISION

M.SC PHYSICS
2017 AND LATER

ELECTIVE COURSE OFFERED FOR OTHER MAJOR STUDENTS

| Semester | Course Code | Course Title | Teaching Hours Per Week | Credits | Duration of Exam (Hours) | Internal War | External Sy | Lotal |
|----------|---------------------|----------------------------------|----------------------------------|---------|--------------------------------|--------------|-------------|-------|
| п | HLPH2E1/ HLPH2E2 | Applied Physics/ Microcontroller | 6 | 5 | 3 | 25 | 75 | 100 |

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NAAC SSR Cycle IV (2015-2020)

1.1. CURRICULUM DESIGN AND DEVELOPMENT

1.1.2. REVISION OF SYLLABUS

PERCENTAGE OF SYLLABUS REVISION 2014 AND LATER



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DEPARTMENT OF PHYSICS PERCENTAGE OF SYLLABUS REVISION M.SC PHYSICS 2014 AND LATER

THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS), SIVAKASI.

DEPARTMENT OF PHYSICS M. SC PHYSICS – PROGRAMME CODE: 14PPH

(For those who have joined in June 2014 and later)

Total Number of Courses having changes : 5

Total Number of Courses : 24

Percentage of Revision :25%

Signature of the HOD with Seal

Pr.(Mrs) S.SIVA DEVI HOD of Physics The S.F.R.College for Women SIVA.KASI - 626 123.

T-Polantes:

Description of Palaneeswari

PRINCIPAL

The Standard Firework

Rajaratnam College

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DEPARTMENT OF PHYSICS PERCENTAGE OF SYLLABUS REVISION M.SC PHYSICS 2014 AND LATER

THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS), SIVAKASI DEPARTMENT OF PHYSICS
M.Sc. Physics
(For those who have joined in 2014 and later)
CHOICE BASED CREDIT SYSTEM

(For those who have joined in 2014 and later) CHOICE BASED CREDIT SYSTEM PROGRAMME CODE – 14PPH PROGRAMME SCHEME

| - | | | Teaching | | | Mai | rks All | otted |
|----------|------------------------------------|-------------------------------------------------------------------|----------------------|---------|--------------------------------|----------|----------|-------|
| Semester | Course Code | Course Title | Hours Per Week | Credits | Duration of Exam (Hours) | Internal | External | Total |
| | 14PPH11 | Core Courses Mathematical Physics | 6 | 5 | 3 | 25 | 75 | 100 |
| | 14PPH12 | Advanced Classical Mechanics | 6 | 4 | 3 | 25 | 75 | 100 |
| | 14PPH13 | Linear Integrated Circuits | 6 | 4 | 3 | 25 | 75 | 100 |
| I | 14PPH1L | Practical – I | 6 | 4 | 5 | 40 | 60 | 100 |
| | 14PPH1E1/ 14PPH1E2/ 14PPH1E3 | Elective Course I Nanophysics/Microprocessors / Microcontroller | 6 | 5 | 3 | 25 | 75 | 100 |
| | | Total | 30 | 22 | | | | 500 |
| | 14PPH21 | Core Courses Quantum Mechanics – I | 6 | 5 | 3 | 25 | 75 | 100 |
| | 14PPH22 | Statistical Mechanics | 6 | 4 | 3 | 25 | 75 | 100 |
| II | 14PPH23 | Electromagnetic Theory | 6 | 4 | 3 | 25 | 75 | 100 |
| | 14PPH2L | Lab – II | 6 | 4 | 5 | 40 | 60 | 100 |
| | 14PPH2E | Elective Course II Applied Physics | 6 | 5 | 3 | 25 | 75 | 100 |
| | | Total | 30 | 22 | | | | 500 |
| | 14PPPH31 | Core Courses Solid State Physics –I | 6 | 5 | 3 | 25 | 75 | 100 |
| | 14PPH32 | Quantum Mechanics - II | 6 | 4 | 3 | 25 | 75 | 100 |
| Ш | 14PPH33 | Computer Oriented Numerical Methods | 6 | 4 | 3 | 25 | 75 | 100 |
| | 14PPH3L | Practical – III | 6 | 4 | 5 | 40 | 60 | 100 |
| | 14PPH3E/ 14PPH3E1 | Elective Course III Medical Physics CSIR-UGC NET Prelims- Physics | 6 | 5 | 3 | 25 | 75 | 100 |
| | | Total | 30 | 22 | | | | 500 |
| IV | 14PPH41 | Core Courses Solid State Physics –II | 6 | 5 | 3 | 25 | 75 | 100 |

16

85

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DEPARTMENT OF PHYSICS PERCENTAGE OF SYLLABUS REVISION M.SC PHYSICS 2014 AND LATER

| | Total | 30 | 24 | | | | 500 |
|-----------------------|---------------------------------------------------------------------------|----|----|---|----|-----|-----|
| 14PPH4P | Project and viva voce | 6 | 5 | - | - | 100 | 100 |
| 14PPH4E1/ 14PPH4E2 | Elective Course IV Advanced Digital Electronics/ Recent Trends in Physics | 6 | 5 | 3 | 25 | 75 | 100 |
| 14PPH43 | Molecular Spectroscopy | 6 | 4 | 3 | 25 | 75 | 100 |
| 14PPH42 | Nuclear Physics | 6 | 5 | 3 | 25 | 75 | 100 |

ELECTIVE COURSE OFFERED FOR OTHER MAJOR STUDENTS

| r. | | | Teaching | | | Mar | ks Allo | otted |
|----------|----------------|-----------------|----------------------|---------|--------------------------------|----------|----------|-------|
| Semester | Course Code | Course Title | Hours Per Week | Credits | Duration of Exam (Hours) | Internal | External | Total |
| II | 14PPH2E | Applied Physics | 6 | 5 | 3 | 25 | 75 | 100 |

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