

## DEPARTMENT OF PHYSICS

### SACRED HEART COLLEGE, THEVARA (AUTONOMOUS)

#### Minutes on Board of Studies Meeting Held on 17 October, 2015 at 02:00 PM

A meeting was held at the Department of Physics SH College, Thevara by the members of BoS on 17 October, 2015 at 02:00 pm and the following members attended the same.

1. Prof. N V Unnikrishnan
2. Dr. Joechan Joseph
3. Dr. Pramod Gopinath
4. Dr. Ison V Vanchipurackal
5. Mr. Kuruvilla George
6. Dr. George kutty Joseph
7. Prof. V M George
8. Dr. Siby Mathews
9. Prof. Alex Shinu Scaria
10. Dr. Roby Cherian
11. Dr. Jimmy Sebastian
12. Dr. Sumod S G
13. Dr. Mathew George

**The main agenda was to discuss the PG Syllabus revision and the starting of value-added courses. The important conclusions reached after thorough discussion are listed below.**

- i. The Viva can be split up to each Semester so that final combined viva can be avoided.
- ii. Viva can be conducted internally during the odd semester and external Viva can be limited only during the even semester along with the external (End-Sem) practical examination.
- iii. It was suggested to avoid or reduce the component of attendance in the external mark's evaluation.

- iv. One module, in any one of the papers, in each semester should be removed. The workload in the theory hours must be adjusted in the practical.
- v. In Classical Mechanics paper, modify the Unit IV i.e., General Theory of Relativity.
- vi. Modify the text book of R K Pathria to some other popular book like Nalikaar.
- vii. In Electrodynamics paper, Unit IV can be modified. Some sections can be added with the Instrumentation and Communication Electronics.
- viii. Remove the text book of K D Prasad which is not available now.
- ix. The Reference book of Kennedy and Davis can be updated as the text book.
- x. Remove one module either in Electronics or in Electrodynamics.
- xi. In Electronics, either FET or Analog Communication or both can be removed completely so that continuity will not be affected.
- xii. Number of experiments in each practical paper can be increased from 12 to 15.
- xiii. In the Thermodynamics and Statistics Mechanics, remove one module.
- xiv. Modify some sections of Phase Transition without losing the continuity.
- xv. Text books of S K Sinha can also be included in the list of text book.
- xvi. In the paper Micro Electronics and Semiconductor Devices, Unit I and Unit II can be removed as 8085 and 8086 are being included in the B Sc. syllabus. Instead, one unit with LEDs and Quantum dots etc. from other papers can be combined and included.
- xvii. In Semester IV, modify some sections of CW spectrometer in Atomic and Molecular Spectroscopy Design.
- xviii. In Nuclear Physics, improve the sections of Particle Physics.
- xix. In addition to the above suggestions, modifications can also be done after discussing with subject experts. However, it must be discussed thoroughly in the Department level meetings and finally must be approved by the number of BoS.
- xx. It was decided to start the following value-added courses.

a) GNU Octave.

b) Introduction to LaTeX

  
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Principal  
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## DEPARTMENT OF PHYSICS

### SACRED HEART COLLEGE, THEVARA (AUTONOMOUS)

#### Minutes on Board of Studies Meeting Held on 25 January, 2017 at 03:30 PM

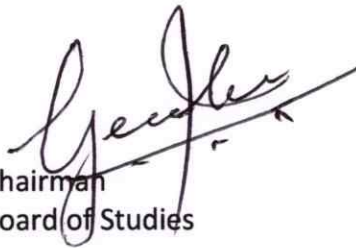
A meeting was held at the Department of Physics, SH College, Thevara by the members of BoS on 25 January, 2017 at 03:30 pm and the following members attended the same.

1. Dr. Ison V Vanchipurackla
2. Mr. Kuruvilla George
3. Dr. Georgekutty Joseph
4. Prof. V M George
5. Dr. Siby Mathew
6. Dr. Jimmy Sebastian
7. Dr. Sumod S G
8. Dr. Mathew George


The meeting started with a silent prayer followed by the welcome address by Dr. Georgekutty Joseph. The following aspects were discussed in detail,

1. The Essay Section in MSc (S2) Question paper has to be modified in the following way.
  - i) Essay (1) from Unit I or Essay (2) from Unit I
  - ii) Essay (3) from Unit II or Essay (4) from Unit II
  - iii) Essay (5) from Unit III or Essay ( ) from Unit IV
2. The papers which contain 3 units, no need to update/modify every year since no issues are there.
3. Additional experiments like Arc Spectra must be included in the syllabus and must be updated accordingly.
4. A one-day (two-day) BoS was planned, probably during the month of June 2017, primarily to discuss the revision of UG Syllabus. In combination with PG, the BoS may be extended to 4 days.
5. The study tour may be included as a separate component so that identified credit can be given to it.

6. Design/simulation tools may be included in the MSc. As a separated program (MATLAB, LABVIEW etc.)
7. Question paper associated issues may be solved by contacting suitable external experts Dr. Ison admitted that he can be one of the external experts for Condensed Matter Physics.
8. Learning UG Physics with GNU Octave may be introduced as a new value-added course.



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## DEPARTMENT OF PHYSICS

### SACRED HEART COLLEGE, THEVARA (AUTONOMOUS)

#### Minutes on Board of Studies Meeting Held on 22 July, 2017 at 10:30 AM

A meeting was held at the Department of Physics, SH College, Thevara by the members of BoS on 22 July, 2017 at 10.30 am and the following members attended the same.

1. Prof. Dr. Pramod Gopinath
2. Dr. Georgekutty Joseph
3. Dr. Siby Mathew
4. Dr. Roby Cherian
5. Dr. Jimmy Sebastian
6. Dr. Sumod S G
7. Dr. Mathew George
8. Dr. Pius Augustine

**The main agenda was to review the UG and PG syllabus of the existing system.**

**Following aspects were discussed in detail:**

- i. Previous syllabus has a major defect that it cannot motivate the students who come freshly into Physics particularly first semester core paper.
- ii. Module I of first semester core of MGU 2017 may not be needed.
- iii. It can be replaced by some basics in Physics so that it forms a bridge between Plus Two and B Sc.
- iv. Reviewed the existing MGU 2017 syllabus, paper wise.
- v. On the basis of the above, following faculty were assigned with the modification of the syllabus (of MGU) and to obtain our new syllabus.

1<sup>st</sup> year 1<sup>st</sup> Semester UG Committee {Dr. Siby Mathew, Dr. Roby and Dr. Jimmy}

Proposed last date: October mid (October 15, 2017)

First year complementary/ 2<sup>nd</sup> year complementary (Review)

Dr. Sumod, Dr. Mathew. Dr. Pius Augustine

Rearrangement of Papers – Prof. V M George and Prof. Alex

- vi. For MSc. we have decided to follow the MGU syllabus as such.
- vii. The HoD congratulated Dr. Pius Augustine for achieving the Ph.D.
- viii. There was a discussion on possibility of increasing the number of students for the MSc. Course. Finally, it was decided to keep the same number of students.
- ix. The meeting came to an end at 02:10 pm with the vote of thanks by the Department Secretary.



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## DEPARTMENT OF PHYSICS

### SACRED HEART COLLEGE, THEVARA (AUTONOMOUS)

#### Minutes on Board of Studies Meeting Held on 29 June, 2018 at 10:30 AM

A meeting was held at the Department of Physics, SH College, Thevara by the members of BoS on June 29, 2018 at 02:00 pm and the following members attended the same

1. Prof. Dr. Pramod Gopinath
2. Dr. Ison V Vanchipurackal
3. Prof. V M George (HoD)
4. Dr. Siby Mathew
5. Prof. Alex Shinu Scaria
6. Dr. Roby Cherian
7. Dr. Jimmy Sebastian
8. Dr. Sumod S G
9. Dr. Mathew George
10. Dr. Pius Augustine
11. Dr. Georgekutty Joseph
12. Prof. Malini Abraham


**The main agenda was to revise the existing UG syllabus. A detailed discussion to analyze each of the papers been carried out. The main conclusions are given below.**

1. First semester Physics paper has been modified with new topics with some problem-oriented approach. New syllabus suggested by Dr. Jimmy Sebastian has been thoroughly discussed and accepted after slight modification.
2. Reference Text books have been modified as suggested by the BoS members.
3. Mercury has been removed from the experiments; instead, Boy's method was suggested.
4. For the UG core, papers entitled (i) Mechanics and Properties of Matter-Sem II, (ii) Classical and Quantum Mechanics-Sem V, (iii) Thermal and Statistical Physics-Sem VI, (iv) Relativity and spectroscopy-Sem VI, (v) Digital Electronics and Programming-Sem V (vi) Methodology and Perspectives of Physics-Sem I, minor additions were incorporated in the syllabus for the UG 2019 admission onwards.

5. For the UG core, new papers such as (i) Optics, Laser and Fiber Optics-Sem III, (ii) Semiconductor Physics-Sem V, (iii) Electricity and Electrodynamics-Sem IV, (v) Energy and Environmental Physics (Sem-V)(vi) Physics in Daily Life (Open course-Sem V) , (vii)-Solid State Physics-(Sem VI) were introduced.
6. Two new choice-based courses-Computational Physics and Material Science were introduced in Sem VI.
7. For Complementary (Mathematics main) papers, entitled (i) Properties of Matter and Error Analysis, (ii) Mechanics and Astrophysics (iii) Modern Physics and Electronics (iv) Optics and Electricity were renamed and modified, respectively for the semesters from I to IV.
8. For Complementary (Chemistry main) papers entitled (i) Properties of Matter and Thermodynamics, (ii) Mechanics and Superconductivity (iii) Modern Physics and Magnetism Optics and (iv) Solid State Physics were renamed and modified, respectively for the semesters from I to IV.
9. In addition, all the practical papers were reorganized.
10. Other topics remain the same as MG University topics and total credits for the programme is 120.
11. A new value-added course was given approval – Robotics.

The meeting came to an end at 04.30 pm.

  
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**DEPARTMENT OF PHYSICS**  
**SACRED HEART COLLEGE, THEVARA (AUTONOMOUS)**  
**Minutes on Board of Studies Meeting Held on 15 March, 2019**

A meeting was held at the Department of Physics on 15<sup>th</sup> march 2019 at 11.00 am followed by the common address by the Principal. Following members attended the meeting.

1. Prof. Dr. Pramod Gopinath
2. Dr. Annieta Philip K.
3. Dr. Ison V Vanchipurackal
4. Prof. V M George (HoD)
5. Dr. Siby Mathew
6. Prof. Alex Shinu Scaria
7. Dr. Roby Cherian
8. Dr. Jimmy Sebastian
9. Dr. Sumod S G
10. Dr. Mathew George
11. Dr. Pius Augustine
12. Dr. Georgekutty Joseph
13. Prof. Malini Abraham


The main agenda was to make a comparative analysis of the present UG syllabus of university and SHC. HoD presented the feedback from previous UG batch students and those were discussed in detail. The new UG syllabus implementation plan was thoroughly discussed and need for add on courses was pointed out. PG syllabus review, question paper pattern etc. were also discussed. Important conclusions are given:

- i. Evaluation must be taken for programme and faculty separately from the students.
- ii. Following add on courses were suggested and the concerned faculty members were assigned for framing the 30 hrs syllabus for the courses.
  - a. Electronics and Electrical Equipment Maintenance – Prof. Alex

- b. Robotics, an Introduction – Dr. Siby Mathew
  - c. Fundamentals of Programming – Dr. Roby Cherian
  - d. Problem Solving in Physics and RBPT – Dr. Jimmy Sebastian
  - e. Skill oriented course on Wiring and Plumbing – Dr. Pius Augustine
  - f. Introduction to Radio Astronomy – Dr. Mathew George
  - g. Introduction to Space Physics – Dr. Sumod S G
- iii. **For the PG syllabus revision, the faculty members were asked to form the syllabus and it was decided to implement from 2020 onwards.** In addition, the following elective courses were also included from the contribution from following faculty members.
- Elective Course 1: Science and Technology for Nanomaterials – Dr. Pius Augustine
- Elective Course 2: Space Physics and Atmospheric Sciences – Dr. Sumod S G
- iv. A draft version of the minutes of BoS meeting can be sent to individual members of BoS through Gmail.

The meeting came to end at 02.30 pm.

For  
  
Chairman  
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