

VISTAS - SCHOOL OF LIFE SCIENCES
DEPARTMENT OF BIOTECHNOLOGY
MINUTES OF THE MEETING OF THE BOARD OF STUDIES

Date 23/01/2015

Time: 10.30 A.M Venue: Pharmacy Conference Hall

The meeting of the Board of Studies of M.Sc. Applied Medical Biotechnology and Clinical Research of the Department of Biotechnology, School of Life Sciences, Vels University was held at 10.30 A.M on 23/01/2015 in the Pharmacy conference hall of the School of Pharmaceutical Sciences. The curriculum and syllabus for M.Sc. Applied Medical Biotechnology and Clinical Research Programme proposed to be introduced by the department, from the academic year 2015-2016 for terminology change of course name revision and introduction of CBCS of curriculum and syllabus change.

The following persons were invited to attend the meeting:

S.No	Name and Address (Members of the Board of Studies)	Designation
1.	Dr.C.Arulvasu, Assistant Professor , Dept of Zoology, University of Madras, Guindy, Chennai-20.	External Expert
2.	Dr.J.Vijay Venkatraman, Head,Climinds-Tamilnadu and Pondicherry, Climinds Coimbatore Centre, 2 nd Floor,KTVR,219, MaruthaKonar Road,Velandipalayam, Coimbatore-641025	External Expert (Industry)
3.	Dr.V.Ravichandran School of Pharmaceutical Sciences, Vels University, Pallavaram, Chennai.117.	Internal Member
4.	Dr.G.Kathiravan, Assistant Professor, Dept of Biotechnology, Vels University, Pallavaram, Chennai.117.	Internal Member
5.	Ms.J.E.Valentina, IIM.Sc.Medical Biotechnology and Clinical Research, Dept of Biotechnology, Vels University, Pallavaram, Chennai.117.	Student Member
6.	Dr.K.Rajagopal Head, Department of Biotechnology, Vels University, Pallavaram, Chennai-117.	Convener

The following are the recommendations of the Committee on the subject matter.

- The committee suggested for changes in the course name from M.Sc., Medical Biotechnology and Clinical Research to M.Sc., Applied Medical Biotechnology and Clinical Research because of the incorporation of several applied papers included in the syllabus.
- The committee scrutinized the syllabus and suggested several changes in the contents of the syllabus, title of the paper, introduction of new paper and merging of existing papers in theory and practical according to the CBCS pattern of latest UGC guidelines.
- The total credits for the course fixed to 85 instead of 98 given in 2011-2012 regulations for this course.
- The entire curriculum structure revised in to three main categories like Core courses, Discipline Specific Elective courses and Generic Elective Courses. All of these courses the Discipline Specific Elective courses and Generic Elective Courses are selected by students based on the CBCS pattern, the choice given to them for selection. The Generic Elective Courses offered to other school students by Department of biotechnology
- The Discipline Specific Elective courses are
 1. Human Physiology
 2. Human Genetics and Developmental Biology
 3. Advanced Medical Biophysics and Biomedical Instrumentation
 4. Nano and Pharmaceutical Biotechnology
 5. Tissue Engineering and Stem Cell Biology
 6. Biomedical Waste Management
 7. Medical Coding & Pharmacovigilance and Safety Monitoring
 8. Regulatory affairs, GLP, IPR, Entrepreneurship and Bioethics in Clinical Research
 9. Project Management and Business Development
 10. Clinical Operations & Clinical Data Management
 11. Tools and Model Organisms in Biomedical Research

Out of these courses the students should select any two papers / Semester from Semesters of 1-3.

- The Generic Elective Courses are offered for other department students, the courses are
 1. Medical Transcription and Coding
 2. Biomedical Waste Management
 3. Biotechnology and Human Welfare
 4. Environmental Biotechnology
 5. Entrepreneurship Development

Out of these courses the students should select any one paper / Semester from Semesters of 1-3. Our students should select one Generic Elective Courses per semester offered by other departments.

- The first three semesters the students should study four Core courses compulsory which include two theory papers and two practical papers except in the second semester

students have to undergo internship programme. In the second semester the internship programme was included in the core courses.

➤ The final semester will have only project/Dissertation and viva-voce.

➤ **In semester One**

1. The Core Paper- I Medical Biochemistry and Cell Biology title renamed as Applied Medical Biochemistry and Cell Biology .The syllabus was also changed
2. The Core Paper- II Applied Clinical Microbiology has been renamed as Clinical Microbiology and Medical Record Science .The syllabus for Medical Record Science has been incorporated newly.
3. Two practical's were introduced instead (Practical I- Lab in Biochemistry and Practical II- Lab in Cell Biology) of previous regulation 2011-2012.
4. The Elective Paper I Human Biology is renamed as Human Physiology and minor changes were made in the syllabus also this paper which was included in the DSE.
5. The Elective Paper II Nano and Pharmaceutical Biotechnology have been shifted from semester I of previous regulation 2011-2012 to DSE courses in the regulation 2015-2016.

➤ **In semester Two**

1. The Core Paper C-IX of previous regulation 2011-2012 Statistics for Clinical Research has been modified as Statistics for Clinical Research and Research Methodology recent topics on Research Methodology were included in the second semester.
2. The Core Paper V Genetic Engineering, Genomics and Proteomics has been renamed as Genetic Engineering and Computational Biology. Several new topics have been included and the syllabus was revised.
3. In addition to that practical IV Lab in Clinical Microbiology and internship programme were introduced in the new syllabus.
4. In the Second Semester Internship duration was reduced from three weeks to one week and a credit was given. A student must present and submit a report on Internship at the end of semester.
5. The Elective Paper IV Title-Introduction to Tissue Engineering and Stem Cells Biology has been renamed it as Tissue Engineering and Stem Cells Biology the syllabus content was modified and also this paper was included in the DSE.
6. The Elective Paper IV Title Human Genetics and Developmental Biology of previous regulation 2011-2012 was also included in the DSE.

➤ **In semester Three**

1. In semester II the Core Paper IV has been renamed as Advanced Clinical and Molecular Diagnostic Techniques instead of Advanced Clinical Diagnostic Techniques in the previous regulation. The entire syllabus has been revised and this paper was included in the third semester.
2. Two practical's were introduced instead (Practical V - Practical V - Lab in Advanced Clinical and Molecular Diagnostic- Techniques and Practical VI - Lab in Medical immunology) of previous regulation 2011-2012.
3. The DSE courses Advanced Medical Biophysics and Biomedical Instrumentation has been newly incorporated in the syllabus.
4. The Core Paper VII Introduction to Clinical Research and Clinical Operations and Clinical Data Management of previous regulation 2011-2012 has been merged to Clinical Operations and Clinical Data Management also this paper was included in the DSE.

➤ **In semester Four**

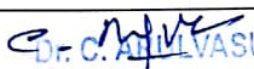




1. The students have only Project /Dissertation and Viva-voce. Students have to do the research work in the field of medical biotechnology or Clinical Research with advice of the research guide in a particular topic for a period of 6 months duration in the department of Biotechnology Vels University or research industries or research laboratories. After the completion of project work, the student should submit the dissertation in the university prescribed format and then attend the Viva-voce exam.
- The two DSE papers Biomedical Waste Management and Medical Coding and Pharmacovigilance (Instead of Pharmacovigilance and safety monitoring) are included in the present syllabus.
 - In the third semester Elective paper-V Regulatory affairs, GLP, IPR and Bioethics in Clinical Research and Elective paper-VI Project Management and Business Development are included in the DSE.
 - In the Elective paper-V Regulatory affairs, GLP, IPR and Bioethics in Clinical Research paper was changed to Regulatory affairs, GLP, IPR, Entrepreneurship and Bioethics in Clinical Research in the new syllabus
 - A new DSE Paper Tools and Model Organisms in Biomedical Research is included in the present syllabus.
 - BOS approved that there shall be no minimum mark for internal assessments however there shall be a passing minimum in semester and examination both for theory and practical's /project and vice voce examination.
 - The pattern of question paper will be

PART-A [50 words answer] [10x3=30]
PART-B [200 words answer] [5x8=40]
PART-C (500 words answer) [2x15=30].

All the above modification in the syllabus was carried out in order meet the advancement in the field of Medical Biotechnology and Clinical Research, to equip the students to compete with other university students for job and research, to face the competitive exams at national level; this syllabus revision was carried out.

The BOS Committee members scrutinized the papers and content, the members approved the syllabus M.Sc. Applied Medical Biotechnology and Clinical Research from the academic year 2015-2016 onwards.

During BOS meeting, the following members were present except serial number 2

S.No	Name and Address (Members of the Board of Studies)	BOS Designation	Signature
1.	Dr.C.Arulvasu, Assistant Professor , Dept of Zoology, University of Madras, Guindy, Chennai-20.	External Expert	 Dr. C. ARULVASU, M.Sc., M.Phil., Ph.D., Assistant Professor Department of Zoology University of Madras Guindy Campus, Chennai-600 025, India
2.	Dr.V.Ravichandran School of Pharmaceutical Sciences, Vels University, Pallavaram, Chennai.117.	Internal Member	
3.	Dr.G.Kathiravan, Assistant Professor, Dept of Biotechnology, Vels University, Pallavaram, Chennai.117.	Internal Member	 Dr. G. Kathiravan, MSc., M.Phil., Ph.D. Assistant Professor Department of Biotechnology Vels University Pallavaram, Chennai - 600 117.
4.	Ms.J.E.Valentina, IIM.Sc. Medical Biotechnology and Clinical Research, Dept of Biotechnology, Vels University, Pallavaram, Chennai.117.	Student Member	
5.	Dr.K.Rajagopal Head, Department of Biotechnology, Vels University, Pallavaram, Chennai-117.	Convener	 HOD Dept. of Biotechnology VELS UNIVERSITY Pallavaram, Chennai-600 117.