THE TAMIL NADU Dr. M.G.R.MEDICAL UNIVERSITY
Post Bag No.1200, No.69, (Old No.40) Anna Salai, Guindy,
Chennai – 600 032. Phone No.22353576 – 79, Fax: 91-44-22353698.
Grams: MEDICLAVE, Web Site: www.tnmgrmu.ac.in

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Prof.Dr.T. BALASUBRAMANIAN M.S.DLO., REGISTRAR.

AC-II(4)/06665/2017

Dated:24.07.2017

To The Principals of all

The Principals of all Pharmacy Colleges affiliated to this University.

Sir/Madam,

Sub: Academic – The Tamil Nadu Dr. M.G.R. Medical University, Chennai – Resolutions of Standing Academic Board Meeting held on 27.04.2017 – Communicated – Regarding.

Ref: 1. Minutes of the Meeting of the Board of Studies in UG/PG Pharmacy Courses held on 19-04-2017.

- Extract of the Minutes of the Meeting of the 53rd Standing Academic Board held on 27-04-2017.
- Copy of Resolution No. 25 Passed at 253rd meeting of the Governing Council, held on 29-06-2017.

I am to inform you that the Meeting of the Board of Studies in UG/PG Pharmacy Courses was held on 19.04.2017 and discussed various academic matters. The decisions of the Board of Studies in Pharmacy Courses was resolved by the 53rd meeting of the Standing Academic Board, held on 27.04.2017 and passed in the 253rd Meeting of the Governing Council held on 29.06.2017 which are detailed below:

POINT NO:1

B-PHARM AND M-PHARM REGULATION AND SYLLABUS PRESCRIBED BY THE PHARMACY COUNCIL OF INDIA, NEW DELHI TO BE IMPLEMENTED FROM 1ST AUGUST 2017 ONWARDS

It was resolved to approve -

Dr. N.SENTHICKUWAR,
PRINCIPAL

JKK MUNIRAJAH MEDICAL RESEARCH FOUNDATION
ANNAI JKK SAMPOGRANI AMMAL COLLEGE OF PHARMACY
ETHIRMEDU, KOMARAPALAYAM - 638 183.
NAMAKKAL DISTRICT, TAMILNADU, INC.A.

- 1. the Regulations and Syllabus for B. Pharm and M. Pharm prescribed by the Pharmacy Council of India, New Delhi and be implemented from the academic year 2017-2018 admission onwards.
- 2. First semester examination for M. Pharmacy will be held from November 15th onwards as the course of study starts from 1st June and 100 working days are essential for the completion of a semester. The 2nd semester Examinations will be held from May 15th onwards.
- 3. For B.Pharmacy course Odd semester Examinations will be held from 1st February onwards and Even semester Examinations from 1st August onwards.

POINT NO:2

CERTAIN POINTS ON PHARM.D COURSE:

I. Confirmation regarding the First year Pharm. D University Examinations in the month of August, 2017 for the candidates admitted during the academic year 2016-17 as discussed in the previous BOS (Pharmacy) meeting.

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It was resolved

- 1. From the Academic year 2017-18 onwards, First year Pharm.D University theory examinations shall be conducted in the month of August.
 - To conduct First Year Pharm.D University Practical Examinations after the completion of B.Pharm University Practical Examinations. The Pharm-D Second to Fifth year University theory Examinations shall be conducted as per the existing schedule.
 - 3. Since, the new PCI Syllabus & Regulation has to be followed from 2017-18 batch onwards, a decision has to be taken whether to adopt the suggested change of syllabus in the subject Advance Pharmacognosy for the Final year B.Pharm.

It was **resolved** to adopt the change of syllabus recommended by the PCI in the subject Advance Pharmacognosy for the Final year B.Pharm. This will be implemented for the candidates admitted from the academic year 2014-15 admission onwards.

II. Modifications in the mark statement for the Pharm.D course:

In the marks statement, there must be an additional column showing the practical marks out of 70 including Orals.

It was resolved to follow the recommendations of the 52nd Standing Academic Board for the modifications in the mark statement for the course Pharm.D showing the Practical marks out of 30 including Orals. This has already been implemented from October 2016 Examination session onwards.

Dr. N.SENTHILKUMAR,
PRINCIPAL

JKK MUNIRAJAH MEDICAL RESEARCH FOUNDATION
ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY
ETHIRMEDU, KOMARAPALAYAM - 638 183.
NAMAKKAI DISTRICT, TAMILNADU, INBIA.

4. A Proposal to be sent to Pharmacy Council of India, New Delhi to conduct a Seminar/Workshop at the Tamil Nadu Dr.M.G.R Medical University, Chennai, to update the Faculty Members of the affiliated colleges about .the PCI's new regulation & syllabus in both B.Pharm & M.Pharm courses.

It was also **resolved** to send a proposal to the PCI, to conduct the Seminar/Workshop at the University premises for the benefit of faculties of the affiliated Institutions preferably during 3rd week of July on 20 and 21st July 2017

POINT NO:3

It was resolved to modify the Distribution of Practical /Oral Marks for M.Pharmacy subjects which was a typographical error as approved in the 52nd Standing Academic Board as follows:-

M.Pharmacy - Modern Pharmaceutical Analytical Technology as approved in 52nd SAB

Reg. No App Written Practical Oral Total IA Practical G.Total Results

App	Written	Practical	Oral	Total. IA	Practical I.A	G.Total	Results
	100	80	20	50	50	300	
	50	40	10	NM	NM	100	
	Арр	100	100 80	100 80 20	100 80 20 50	100 80 20 50 50	100 80 20 50 50 300

<u>Distribution of Practical/Oral marks for all the M.Pharmacy subjects of All Specialities as follows:</u>

Reg. No Written Practical App Oral Theory. Practical G.Total Results IA LA Max 100 20 80 50 50 300 Min.Pass 50 40 10 NM NM 150

This will be implemented from May 2017 Examination session onwards.

Dr. N.SENTHILKUMAR, PRINCIPAL

I request that the decisions of the Standing Academic Board as mentioned above may be communicated to all the professors and Head of the Departments for information and further followup action in this regard.

I am also to request that a copy may be displayed on the Notice Board of the College and Hostel for information to the students concerned.

The above decisions are available in the University website - www.tnmgrmu.ac.in → academic decisions.

I request that the receipt of this letter may be acknowledged.

Yours faithfully,

Copy to:

- 1. The Chairman and Members of the Board of Studies in Pharmacy
- 2. The Vice Chancellor's Office (Through the Personal Secretary)
- 3. The Controller of Examinations i/c
- 4. The Academic Officer
- 5. The Course i/c (Pharmacy)
- 6. The Assistant Registrar (Affiliation Pharmacy).
- 7. The Deputy Registrar (Academic)
- 8. The Assistant Registrar (Examinations Pharmacy)
- 9. Personal Secretary to Registrar
- 10 The Systems Analyst With a request to publish in the University Website
- 11. The Section Officer (Pharmacy Academic Wing)
- 12. The Section Officer (Pharmacy Section in Exam Wing)
- 13. The Section Officer (Pharmacy Section in Affiliation)

14. Spare

Dr. N.SENTHILKUMAR,

2016

THE MASTER OF PHARMACY (M. PHARM.)
COURSE REGULATION 2014

(BASED ON NOTIFICATION IN THE GAZETTE OF INDIA NO. 362, DATED DECEMBER 11, 2014).

SCHEME AND SYLLABUS



PHARMACY COUNCIL OF INDIA Combined Council's Building, Kotla Road, Aiwan-E-Ghalib Marg, New Delhi-110 002. Website: www.pci.nic.

Attendance and progress

A candidate is required to put in at least 80% attendance in individual courses considering theory and practical separately. The candidate shall complete the prescribed course satisfactorily to be eligible to appear for the respective examinations.

7. Program/Course credit structure

As per the philosophy of Credit Based Semester System, certain quantum of academic work viz. theory classes, practical classes, seminars, assignments, etc. are measured in terms of credits. On satisfactory completion of the courses, a candidate earns credits. The amount of credit associated with a course is dependent upon the number of hours of instruction per week in that course. Similarly the credit associated with any of the other academic, co/extracurricular activities is dependent upon the quantum of work expected to be put in for each of these activities per week/per activity.

7.1. Credit assignment

7.1.1. Theory and Laboratory courses

Courses are broadly classified as Theory and Practical. Theory courses consist of lecture (L) and Practical (P) courses consist of hours spent in the laboratory. Credits (C) for a course is dependent on the number of hours of instruction per week in that course, and is obtained by using a multiplier of one (1) for lecture and a multiplier of half (1/2) for practical (laboratory) hours. Thus, for example, a theory course having four lectures per week throughout the semester carries a credit of 4. Similarly, a practical having four laboratory hours per week throughout semester carries a credit of 2. The contact hours of seminars, assignments and research work shall be treated as that of practical courses for the purpose of calculating credits. i.e., the contact hours shall be multiplied by 1/2. Similarly, the contact hours of journal club, research work presentations and discussions with the supervisor shall be considered as theory course and multiplied by 1.

7.2. Minimum credit requirements

The minimum credit points required for the award of M. Pharm. degree is 95. However based on the credit points earned by the students under the head of co-curricular activities, a student shall earn a maximum of 100 credit points. These credits are divided into Theory courses, Practical, Seminars, Assignments, Research work, Discussions with the supervisor, Journal club and Co-Curricular activities over the duration of four semesters. The credits

DICAL RESIDENCE TO CHARACTER TO

Dr. N.SENTHILKUMAK PRINCIPAL

are distributed semester-wise as shown in Table 14. Courses generally progress in sequence, building competencies and their positioning indicates certain academic maturity on the part of the learners. Learners are expected to follow the semester-wise schedule of courses given in the syllabus.

8. Academic work

A regular record of attendance both in Theory, Practical, Seminar, Assignment, Journal club, Discussion with the supervisor, Research work presentation and Dissertation shall be maintained by the department / teaching staff of respective courses.

Course of study

The specializations in M.Pharm program is given in Table 1.

Table - 1: List of M.Pharm. Specializations and their Code

S. No.	Specialization	Code
1.	Pharmaceutics	MPH
2.	Industrial Pharmacy	MIP
3.	Pharmaceutical Chemistry	MPC
4.	Pharmaceutical Analysis	MPA
5.	Pharmaceutical Quality Assurance	MQA
6.	Pharmaceutical Regulatory Affairs	MRA
7.	Pharmaceutical Biotechnology	MPB
8.	Pharmacy Practice	MPP
9.	Pharmacology	MPL
10.	Pharmacognosy	MPC

The course of study for M.Pharm specializations shall include Semester wise Theory & Practical as given in Table - 2 to 11. The number of hours to be devoted to each theory and practical course in any semester shall not be less than that shown in Table - 2 to 11.



Dr. N.SENTHILKUMAR

Table - 2: Course of study for M. Pharm. (Pharmaceutics)

Course Code	Course	Credit Hours	Credit Points	Hrs./w	Marks
	Seme	ster I			
MPH101T	Modern Pharmaceutical Analytical Techniques	4	4	4	100
MPH102T	Drug Delivery System	4	4	4	100
MPH103T	Modern Pharmaceutics	4	4	4	100
MPH104T	Regulatory Affair	4	4	4	100
MPH105P	Pharmaceutics Practical I	12	6	12	150
	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650
	Semo	ster II			
MPH201T	Molecular Pharmaceutics (Nano Tech and Targeted DDS)	4	4	4	100
MPH202T	Advanced Biopharmaceutics & Pharmacokinetics	4	4	4	100
MPH203T	Computer Aided Drug Delivery System	4	4	4	100
MPH204T	Cosmetic and Cosmeceuticals	4	4	4	100
MPH205P	Pharmaceutics Practical II	12	6	12	150
	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650

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Table - 4: Course of study for M. Pharm. (Pharmaceutical Chemistry)

Course Code	Course	Credit Hours	Credit Points	Hrs./w k	Marks
	Sem	ester I			
MPC101T	Modern Pharmaceutical Analytical Techniques	4	4	4	100
MPC1012T	Advanced Organic Chemistry -I	4	4	4	100
MPC103T	Advanced Medicinal chemistry	4	4	4	100
MPC104T	Chemistry of Natural Products	4	4	4	100
MPC105P	Pharmaceutical Chemistry Practical I	12	6	12	150
	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650
	Seme	ster II			
MPC201T	Advanced Spectral Analysis	4	4	4	100
MPC202T	Advanced Organic Chemistry -II	4	4	4	100
MPC203T	Computer Aided Drug Design	4	4	4	100
MPC204T	Pharmaceutical Process Chemistry	4	4	4	100
MPC205P	Pharmaceutical Chemistry Practical II	12	6	12	150
- 12	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650



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Table - 5: Course of study for M. Pharm. (Pharmaceutical Analysis)

Course	Credit	Credit	Hrs./wk	Marks
Seme		Tomis		
Modern Pharmaceutical	4	4	4	100
Advanced Pharmaceutical Analysis	4	4	4	100
Pharmaceutical Validation	4	4	Δ	100
Food Analysis	4			100
Pharmaceutical Analysis Practical I	12	6	12	150
Seminar/Assignment	7	4	7	100
Total	35		NAME OF TAXABLE PARTY.	650
Semes	ter II			050
Advanced Instrumental Analysis	4	4	4	100
Modern Bio-Analytical Techniques	4	4	4	100
Quality Control and Quality Assurance	4	4	4	100
Herbal and Cosmetic Analysis	4	4	4	100
Pharmaceutical Analysis Practical II	12	6	12	150
Seminar/Assignment	7	4	7	100
Total	35	26		650
	Modern Pharmaceutical Analytical Techniques Advanced Pharmaceutical Analysis Pharmaceutical Validation Food Analysis Pharmaceutical Analysis Practical I Seminar/Assignment Total Semes Advanced Instrumental Analysis Modern Bio-Analytical Techniques Quality Control and Quality Assurance Herbal and Cosmetic Analysis Pharmaceutical Analysis Practical II Seminar/Assignment	Semester I Modern Pharmaceutical Analytical Techniques Advanced Pharmaceutical Analysis Pharmaceutical Validation Food Analysis Pharmaceutical Analysis Practical I Seminar/Assignment Total Advanced Instrumental Analysis Pach Instrumental Analysis Advanced Instrumental Analysis Podern Bio-Analytical Techniques Quality Control and Quality Assurance Herbal and Cosmetic Analysis Pharmaceutical Analysis Practical II Seminar/Assignment 7 Semester II Advanced Instrumental 4 Pharmaceutical Analytical 4 Pharmaceutical Analysis Practical II Seminar/Assignment 7	Semester I Modern Pharmaceutical Analytical Techniques 4 Advanced Pharmaceutical Analysis 4 Pharmaceutical Validation 4 Food Analysis 4 Pharmaceutical Analysis Practical I 35 Seminar/Assignment 7 Advanced Instrumental Analysis 4 Modern Bio-Analytical Techniques 4 Quality Control and Quality Assurance 4 Herbal and Cosmetic Analysis Practical II 12 Seminar/Assignment 4 Herbal and Cosmetic Analysis Practical II 12 Seminar/Assignment 7 Herbal and Cosmetic Analysis Practical II 12 Seminar/Assignment 7 A Seminar/Assignment 7 A Seminar/Assignment 7 A	Semester I Modern Pharmaceutical Analytical Techniques Advanced Pharmaceutical Analysis Pharmaceutical Validation Pharmaceutical Analysis Practical I Seminar/Assignment Total Advanced Instrumental Analysis Pechniques Advanced Instrumental Analysis Practical I Advanced Instrumental Analysis Pechniques Quality Control and Quality Assurance Herbal And Cosmetic Analysis Practical II Seminar/Assignment Advanced Instrumental Analysis Practical II Advanced Instrumental Analysis Practical II Advanced Instrumental Analysis Practical II Advanced Instrumental Analysis Instrumental Analys

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Table - 7: Course of study for M. Pharm. (Regulatory Affairs)

Course Code	Course	Credit Hours	Credit Points	Hrs./ wk	Marks
	Semo	ester I			
MRA 101T	Good Regulatory Practices	4	4	4	100
MRA 102T	Documentation and Regulatory Writing	4	4	4	100
MRA 103T	Clinical Research Regulations	4	4	4	100
MRA 104T	Regulations and Legislation for Drugs & Cosmetics, Medical Devices, Biologicals & Herbals, and Food & Nutraceuticals In India and Intellectual Property Rights	4	4	4	100
MRA 105P	Regulatory Affairs Practical I	12	6	12	150
	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650
	Seme	ster II			
MRA 201T	Regulatory Aspects of Drugs & Cosmetics	4	4	. 4	100
MRA 202T	Regulatory Aspects of Herbal & Biologicals	4	4	4	100
MRA 203T	Regulatory Aspects of Medical Devices	4	4	4	100
MRA 204T	Regulatory Aspects of Food & Nutraceuticals	4	4	4	100
MRA 205P	Regulatory Affairs Practical II	12	6	12	150
	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650



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Table - 9: Course of study for M. Pharm. (Pharmacy Practice)

Course Code	Course	Credit Hours	Credit Points	Hrs./wk	Marks
	Semeste	er I			
MPP 101T	Clinical Pharmacy Practice	4	4	4	100
MPP 102T	Pharmacotherapeutics-I	4	4	4	100
MPP 103T	Hospital & Community Pharmacy	4	4	4	100
MPP 104T	Clinical Research	4	4	4	100
MPP 105P	Pharmacy Practice Practical I	12	6	12	150
	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650
	Semeste	rII			
MPP 201T	Principles of Quality Use of Medicines	4	4	4	100
MPP 102T	Pharmacotherapeutics II	4	4	4	100
MPP 203T	Clinical Pharmacokinetics and Therapeutic Drug Monitoring	4	4	4	100
MPP 204T	Pharmacoepidemiology & Pharmacoeconomics	4	4	4	100
MPP 205P	Pharmacy Practice Practical II	12	6	12	150
	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650



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Table - 10: Course of study for (Pharmacology)

Course Code	Course	Credit Hours	Credit Points	Hrs./wk	Marks
	Seme	ester I			
MPL 101T	Modern Pharmaceutical Analytical Techniques	4	4	4	100
MPL 102T	Advanced Pharmacology-I	4	4	4	100
MPL 103T	Pharmacological and Toxicological Screening Methods-I	4	4	4	100
MPL 104T	Cellular and Molecular Pharmacology	4	4	4	100
MPL 105P	Pharmacology Practical I	12	6	12	150
-	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650
	Seme	ster II			Na le de la
MPL 201T	Advanced Pharmacology II	4	4	4	100
MPL 202T	Pharmacological and Toxicological Screening Methods-II	4	4	4	100
MPL 203T	Principles of Drug Discovery	4	4	4	100
MPL 204T	Experimental Pharmacology practical- II	4	4	4	100
MPL 205P	Pharmacology Practical II	12	6	12	150
	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650



Dr. N.SENTHILKUMAR, PRINCIPAL,

Table - 11: Course of study for M. Pharm. (Pharmacognosy)

Course Code	Course	Credit Hours	Credit Points	Hrs./wk	Marks
	Semes	ter I			
MPG101T	Modern Pharmaceutical Analytical Techniques	4	4	4	100
MPG102T	Advanced Pharmacognosy-1	4	4	4	100
MPG103T	Phytochemistry	4	4	4	100
MPG104T	Industrial Pharmacognostical Technology	4	4	4	100
MPG105P	Pharmacognosy Practical I	12	6	12	150
- 10-4	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650
	Semes	ter II			
MPG201T	Medicinal Plant biotechnology	4	4	4	100
MPG102T	Advanced Pharmacognosy-II	4	4	4	100
MPG203T	Indian system of medicine	4	4	4	100
MPG204T	Herbal cosmetics	4	4	4	100
MPG205P	Pharmacognosy Practical II	12	6	12	150
	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650



Dr. N. SENTHIL KUMAR,

PRINCIPAL

ANNAI JKK SAMPOORANI AMMAL COLLEGE OF PHARMACY,

MAMAKKAL DISTRICT, TAMILNADU.

Table - 12: Course of study for M. Pharm. III Semester (Common for All Specializations)

Course Code	Course	Credit Hours	Credit Points
MRM 301T	Research Methodology and Biostatistics*	4	4
	Journal club	1	1
÷	Discussion / Presentation (Proposal Presentation)	2	2
	Research Work	28	14
	Total	35	21

^{*} Non University Exam

Table - 13: Course of study for M. Pharm. IV Semester (Common for All Specializations)

Course Code	Course	Credit Hours	Credit Points
	Journal Club	1	1
	Research Work	31	16
-	Discussion/Final Presentation	3	3
	Total	35	20

Table - 14: Semester wise credits distribution

Semester	Credit Points
	26
II	26
	21
IV	20
Co-curricular Activities (Attending Conference, Scientific Presentations and Other Scholarly Activities)	Minimum=02 Maximum=07*
Total Credit Points	Minimum=95 Maximum=100*

^{*}Credit Points for Co-curricular Activities

Dr. N.SENTHILKUMAR, PRINCIPAL



Table - 15: Guidelines for Awarding Credit Points for Co-curricular Activities

Name of the Activity	Maximum Credit Points Eligible / Activity
Participation in National Level	01
Seminar/Conference/Workshop/Symposium/ Training Programs (related to the specialization of the student)	
Participation in international Level Seminar/Conference/Workshop/Symposium/ Training Programs (related to the specialization of the student)	02
Academic Award/Research Award from State Level/National Agencies	01
Academic Award/Research Award from International Agencies	02
Research / Review Publication in National Journals (Indexed in Scopus / Web of Science)	01
Research / Review Publication in International Journals (Indexed in Scopus / Web of Science)	02

Note: International Conference: Held Outside India

International Journal: The Editorial Board Outside India

*The credit points assigned for extracurricular and or co-curricular activities shall be given by the Principals of the colleges and the same shall be submitted to the University. The criteria to acquire this credit point shall be defined by the colleges from time to time.

10. Program Committee

- The M. Pharm. programme shall have a Programme Committee constituted by the Head of the institution in consultation with all the Heads of the departments.
- 2. The composition of the Programme Committee shall be as follows: A teacher at the cadre of Professor shall be the Chairperson; One Teacher from eachM.Pharm specialization and four student representatives (two from each academic year), nominated by the Head of the institution.
- 3. Duties of the Programme Committee:
- i. Periodically reviewing the progress of the classes.
- ii. Discussing the problems concerning curriculum, syllabus and the conduct of classes.
- iii. Discussing with the course teachers on the nature and scope of assessment for the course and the same shall be announced to the students at the beginning of respective semesters.



Dr. N.SENTHILKUMA