CENTRAL UNIVERSITY OF SOUTH BIHAR MASTER OF PHARMACY (PHARMACEUTICS)



CURRICULUM STRUCTURE

Central University of South Bihar SH-7 Gaya Panchanpur Road, Village- Karhara, Post Fatehpur, Gaya-824236 Bihar

Annexure I REGULATIONS

"The Revised Regulations for the Master of Pharmacy (M. Pharm.) Degree Program - Credit Based Semester System (CBSS) of the Pharmacy Council of India, New Delhi", has been adopted from The Gazette of India, No. 362, December 11, 2014.

1. Short Title and Commencement

These regulations shall be called as "The Revised Regulations for the Master of Pharmacy (M. Pharm.) Degree Program - Credit Based Semester System (CBSS) of the Pharmacy Council of India, New Delhi". They came in effect from the Academic Year 2016-17. The regulations framed are subject to modifications from time to time by the authorities of the Central University of South Bihar.

2. Minimum qualification for admission

A Pass in the following examinations

- a) B. Pharm Degree examination of an Indian university established by law in India from an institution approved by Pharmacy Council of India and has scored not less than 55% of the maximum marks aggregate of 4 years of B. Pharm. (50% for SC/ST/PH) preference for GPAT/GATE qualified candidate.
- b) Every student, selected for admission to post graduate pharmacy program in any PCI approved institution should have obtained registration with the State Pharmacy Council or should obtain the same within one month from the date of his/her admission, failing which the admission of the candidate shall be cancelled.

Note: It is mandatory to submit a migration certificate obtained from the respective university where the candidate had passed his/her qualifying degree (B. Pharm.)

3. Duration of the program

The program of study for M. Pharm shall extend over a period of four semesters (two academic years). The curricula and syllabi for the program shall be prescribed from time to time by Pharmacy Council of India, New Delhi.

4. Medium of instruction and examinations

Medium of instruction and examination shall be in English.

5. 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.

6. 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/extra- curricular activities is dependent upon the quantum of work expected to be put in for each of these activities per week/per activity.

Credit assignment

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.

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 are

distributed semester-wise as shown in Table. 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.

7. 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.

Central University of South Bihar Department of Pharmacy School of Health Science

Semester-wise structure for the

M. Pharm in Pharmaceutics (MPH) Programme

First Year

Semester I

Table 1: Course of study for M. Pharm. (Pharmaceutics)

| Course Code | Course | Credit Hours | Credit Points | Hrs./w k | Marks |
|----------------|--|-----------------|------------------|-------------|-------|
| | Seme | ester 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 |
| MPH-106 | Seminar/Assignment | 7 | 4 | 7 | 100 |
| | Total | 35 | 26 | 35 | 650 |
| | Seme | ster II | | dia di | |
| 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 |
| MPH-206 | Seminar/Assignment | 7 | 4 | 7 | 100 |
| | Total | 35 | 26 | 35 | 650 |

Total Credits: Semester I & II -26 Credits each

The guide will be chosen based on mutual consent of the student and faculty member. After selection of the research guide the student will formulate his/her Seminar topic (MPH 106 & 206).

Second Year

Semester III: Course of study for M. Pharm. III Semester

| Course Code | Course | Credit Hours | Credit Points | |
|----------------|---|-------------------------|------------------|--|
| MRM 301T | Research Methodology and Biostatistics* | gy and Biostatistics* 4 | | |
| - | Journal club | 1 | 1 | |
| 5 | Discussion / Presentation (Proposal Presentation) | 2 | 2 | |
| 8 | Research Work | 28 | 14 | |
| | Total | 35 | 21 | |

Total Credits: Semester III-21 Credits

| Course Code | Course | Credit Hours | Credit Points | |
|----------------|-------------------------------|-----------------|------------------|--|
| • | Journal Club | 1 | 1 | |
| 180 | Research Work | 31 | 16 | |
| - | Discussion/Final Presentation | 3 | 3 | |
| | Total | 35 | 20 | |

Total Credits: Semester IV-20 Credits

Semester IV: Course of study for M. Pharm. IV Semester

| Semester | Credit Points | |
|--|----------------------------|--|
| I | 26 | |
| П | 26 | |
| Ш | 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* | |

Total Credits: Semester I- IV-95 Credits

*Credit Points for Co-curricular Activities

Guidelines for Awarding Credit Points for Co-curricular Activities

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

Note: International Conference: Held outside India

The research work will start from this Semester. The students will submit progress report and present seminar(s) based on the progress of his/her research work that should be attended by all students in the department, the research guide, the HOD and other faculty of the Department. The student will be evaluated by all faculty members.

Schemes for internal assessments and end semester

| | | Internal Assessment | | | End Semester Exams | | Tota | |
|----------------|---|------------------------|-------|-------------------------------|--------------------------|-----------|--------------|-----------|
| Course Code | Course | Continu ous Mode | | sional ams Durati on | Tot al | Mar ks | Durati on | Mar ks |
| | | SE | MESTE | RI | | | | |
| MPH 101T | Modern Pharmaceuti cal Analytical Techniques | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| MPH 102T | Drug Delivery System | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| MPH 103T | Modern Pharmaceuti cs | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| MPH 104T | Regulatory Affair | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| MPH 105P | Pharmaceuti cs Practical I | 20 | 30 | 6 Hrs | 50 | 100 | 6 Hrs | 150 |
| 23 | Seminar /Assignment | 1511 | - | = | 75 | = | - | 100 |
| | | | otal | D II | | | | 650 |
| | | SE | MESTE | R II | | | | |
| MPH 201T | Molecular Pharmaceuti cs(Nano Tech and Targeted DDS) | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| MPH 202T | Advanced Biopharmac eutics & Pharmacokin etics | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| MPH 203T | Computer Aided Drug Delivery System | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| MPH | Cosmetic | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| 204T | and Cosmeceutic als | | | | | | | |
| MPH 205P | Pharmaceuti cs Practical I | 20 | 30 | 6 Hrs | 50 | 100 | 6 Hrs | 150 |
| 80 | Seminar /Assignment | =: | - | - | - | • | - | 100 |
| | | To | otal | | | | | 650 |

Schemes for internal assessments and end semester examinations

(Semester III& IV)

| Course Code | | Internal Assessment | | | | End Semester Exams | | Tota | |
|----------------|--|---------------------|--------------------|--------------|-----|-----------------------|------------------|-----------|--|
| | Course | Conti | Sessional Exams | | Tot | Mark | Durati | 1 Mark | |
| | | s Mode | Mark s | Durati on | al | s | on | 5 | |
| | | | SEMEST | TER III | | | | | |
| MRM30 1T | Research Methodology and Biostatistics* | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 | |
| 2 | Journal club | × | * | - | 25 | | | 25 | |
| 22 | Discussion / Presentation (Proposal Presentation) | - | =5 | ÷ | 50 | æ. | : 1 % | 50 | |
| - | Research work* | ü | 2 | = | 723 | 350 | 1 Hr | 350 | |
| | Total | | | | | | | | |
| | SEMESTER IV | | | | | | | | |
| ā | Journal club | - | | - | 25 | (=) | 181 | 25 | |
| - | Discussion / Presentation (Proposal Presentation) | 5 | 7: | - | 75 | | | 75 | |
| æ. | Research work and Colloquium | - | 3 | - [| ŀ | 400 | 1 Hr | 400 | |
| | Total | | | | | | | 500 | |