

Vision : ▶ To be a leader in Pharmacy Education, Pharmacy Training and Research in Pharmaceutical Sciences
Mission : ▶ To educate and train students in the knowledge and practice of pharmaceutical sciences ▶ To contribute to improvement of health of the society through education programs ▶ To contribute to improvement of health of the society through research programs

BoS/UG/004/2022

07.07.2022

Minutes of the UG-BoS Meeting

The minutes of the 4th Undergraduate Board of Studies (UG-BoS) meeting of Bombay College of Pharmacy-Autonomous (BoS/UG/004/2022) held Online on Monday, 13th June 2022, from 11.30 a.m. to 1.00 p.m. on Microsoft Teams are as follows

The following UG-BoS members were present for the meeting

1. Prof. Krishna Iyer (I/c Principal and Chairperson, Undergraduate Board of Studies (UG-BoS), Bombay College of Pharmacy)
2. Dr. Ujwala Shinde (Member Secretary, UG-BoS and HOD-Pharmaceutics, Bombay College of Pharmacy)
3. Dr. Alka Mukne (HOD-Pharmacognosy, Bombay College of Pharmacy)
4. Dr. K.S.Laddha (Prof.of Pharmacognosy, Institute of Chemical Technology, Mumbai)
5. Dr. Ashish Babbtiwale (Managing Director, Navigo Analytix India, Mumbai)
6. Dr. Ratnakar Mehendre (Technical Director, Gelnova Laboratories (I) Pvt.Ltd., Navi Mumbai)
7. Mr. Vipul Solanki (Diector, LSI-Special Invitee)
8. Dr. Akshat Chadha (Lifestyle Medicine Expert, Mentor at Lifeness Science Institute (LSI), Mumbai-Special Invitee)
9. Ms. Hardika Vira (Chief Clinical Dietitian, LCHHS, Mentor at LSI, Mumbai-Special Invitee)
10. Ms. Hemali Malaviya (Practising Nutritionist, Mentor at LSI-Special Invitee)
11. Dr. Gopal Sharma (Director, LSI, Mumbai-Special Invitee)
12. Mr. Vijay Shivpuje (Director, Patlex Business Solutions, Mumbai-Special Invitee)
13. Mr. Nitin Maniar (Chairman-Governing Body, BCP-Autonomous)

The following UG-BoS members had conveyed their absence for the meeting

1. Dr. Premlata Ambre (HOD-Pharmaceutical Chemistry, Bombay College of Pharmacy)
2. Dr.Vaishali Shirsat (HOD-Pharmaceutical Analysis, Bombay College of Pharmacy)
3. Dr. Sadhana Sathaye (Prof. of Pharmacology, Institute of Chemical Technology, Mumbai)
4. Dr. Pratima Tatke (Principal and Prof. of Pharmaceutical Chemistry, C.U.Shah College of Pharmacy, S.N.D.T Womens University, Juhu Campus, Mumbai)

Dr. Shalaka Dhat from Bombay College of Pharmacy-Autonomous was present at the meeting to note down the minutes of the UG-BoS meeting and coordinate overall conduct of the meeting.

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At the onset of the meeting, Dr. Krishna Iyer welcomed all the esteemed members of the UG-BoS, Bombay College of Pharmacy-Autonomous and the invitees for their presence at the meeting. Dr. Iyer then proceeded with the agenda for the meeting. Every point in the agenda was taken up for discussion and resolved subsequently.

Agenda points with discussion and resolution

003.01 To confirm the minutes of the previous UG-BoS meeting (BoS/UG/003/2021) held on Thursday, 7th October 2021.

The minutes of the previous (3rd) UG-BoS meeting (BoS/UG/003/2021) held on Thursday, 7th October 2021 were circulated to all the members prior to the meeting by mail. Since there were no changes in the minutes of the last meeting, all the members unanimously agreed to confirm the minutes of the previous UG-BoS meeting.

It was unanimously recommended by the members of UG-BoS, that the minutes of the 3rd UG-BoS meeting (BoS/UG/003/2021) of Bombay College of Pharmacy -Autonomous held on Thursday, 7th October 2021 be confirmed and approved.

003.02 To approve the syllabus for the following two courses in Integrative Nutrition and Dietetics offered by The Indian Pharmaceutical Association-Maharashtra State Branch's Bombay College of Pharmacy in collaboration with Lifeness Science Institute (LSI), Mumbai.

- a. B.Sc. (Hons.) in Integrative Nutrition and Dietetics (3 years course, 6 semesters, 160 credits, CBCGS)
- b. Diploma in Health & Integrative Lifestyle-DHIL (6 months, 30 credits, CBCGS)

Prof. Krishna Iyer briefly explained about the initiative of The IPA-MSB's Bombay College of Pharmacy -Autonomous in starting two Programmes in Integrative Nutrition and Dietetics in association with Lifeness Science Institute (LSI), Mumbai. He then invited Mr. Vipul Solanki, Director, LSI to present the contents of the syllabus and curriculum of the above two courses. Mr. Vipul explained that the B.Sc. program is holistic in nature and hence it is an Integrative Program. He discussed the eligibility, admission process, attendance criteria, eligibility for faculty, credit structure year wise, passing criteria, evaluation pattern (internal and external) and the Pattern for end semester examination. He added that most of these parameters were in line with University of Mumbai guidelines. Mr. Vipul then discussed the Curriculum framework for the B.Sc. course.

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He explained that the B.Sc. (Hons) Program has been designed to be in line with the industrial requirements and involves faculty members from industry and industrial visits for students opting for the course. He briefly introduced Luke Coutinho, Dr. Akshat Chadha and Dr. Hemali Malaviya, the mentors for the program, who were actively involved in developing the curriculum and were playing a key role at the industry-institute interface. Mr. Vipul highlighted the theory topics and practicals for each semester. Mr Vipul discussed in detail the syllabus/modules for B.Sc. (Hons) in Integrative Nutrition and Dietetics. He added that every course in the semester was designed with Course and Program objectives (CO & PO) and were in line with the UGC guidelines. He added that for every course recommended books were mentioned at the end of the course and the same would be procured in the library. Mr. Vipul requested suggestions from the UG-BoS members.

Dr. Mukne mentioned that the year 2022 is an international year of Millets which form an important part of the nutrition. She suggested that details of all millets, especially the traditional millets be specified under the topic of cereals. She also added that there are many antinutrients present in the pulses, which prevent absorption of nutrients in the body. Dr. Mukne mentioned that this was a reason behind soaking the pulses and discarding the water used for soaking prior to use of pulses. She proposed that antinutrients too should be added in the syllabus. Dr. Hemali replied that Cereals include all sorts of grains which are good source of carbohydrates. She added that not only traditional but also newer generation millets such as Proso millets and Kodo millets are covered in the syllabus. She further added that while discussing nutritive value of proteins, the antinutritional components such as saponin, tannins etc are also covered while coaching. She confirmed that in the syllabus the suggestions were covered under a broader term and the syllabus would be modified specifying the different types of millets as well as the antinutritive components in proteins.

Dr. Laddha enquired whether there was any effort made to seek recognition from the National Institute of Nutrition (NIN), an agency under ICMR. Dr. Hemali replied that the guidelines provided by NIN were followed, however there was no formal collaboration with NIN. Mr. Vipul mentioned that they were in touch with agencies such as 'The Nutrition Society of India'(NIS) for placement of the students and other suggestions however, he confirmed that there was no formal tie up with NIS for curriculum enrichment. He also added that since there was already recognition from University of Mumbai for the program, any additional collaboration with institutes such as NIN where they are likely to influence the curriculum delivery would probably not provide them the freedom for developing the curriculum as proposed by the LSI.

Dr. Laddha also raised his concern over the availability of space, infrastructure, and faculty for the said program. Prof. Iyer replied that the faculty for all the programs will be arranged by LSI. He added that there was additional space on the 2nd floor of the college building which can be modified for running the classes for the courses. He further added that for practical, the B. Pharm labs would be shared with B.Sc, however the labs will be occupied for practicals only after the B. Pharm practicals will be done for the day.

Dr. Ratnakar pointed out that regulatory guidelines such as fssai are important and should be a part of syllabus for the B.Sc. nutrition and dietetics course. He recommended that some regulatory knowledge on

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- Accredited by National Board of Accreditation for UG Program for the Academic Year 2017-18 to 2021-22 i.e. up to 30.06.2022
- National Institutional Ranking Framework India Ranking 6th in 2016, 15th in 2017, 8th in 2018, 24th in 2019, 24th in 2020
- Best Industry Linked Pharmacy Institution (Established Degree) 1st in 2013 & 2014, Mentor in 2015 & 2nd in 2019 and Platinum Ranking Highest score band (above 30) all over India
- FICCI 6th higher education excellence award special Jury Mention of Excellence in Enabling Research Environment

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how to apply for *fssai*, etc should be incorporated preferably in the third year of B.Sc. program. Dr. Alka agreed with the suggestion. Dr. Babiwale enquired whether there was a mention in the curriculum with respect to no. of hours/day/week for practicals. Dr. Iyer explained that the curriculum mentions the no. of credits for a practical course and for a 03-credit practical, it is roughly 3 h per week. Dr. Babiwale further raised a concern that the labs may be shared, however there may be a requirement of a lab with specific infrastructure or facility or equipment. He insisted that there should be clear documentation with respect to which laboratories and which specific equipments in a lab will be used for the program. Mr. Vipul clarified that in every semester there are 03 practicals with total of 12 credits or 04 credits per practical. He added that for explanation of practicals classrooms shall be used and labs shall be used only for practicals. Further, Mr. Vipul added that these programs are already running in some other University of Mumbai colleges where they have mapped the practical courses with the lab wise requirements. Dr. Babiwale requested that a document/chart specifying which labs will be used and no. of hours the labs would be occupied per day and per week be clearly mentioned. Dr. Mukne added that the LSI team should also mention the infrastructure and equipments that would be required for conducting the practicals. Mr. Vipul agreed that the same is available and shared with team BCP. Dr. Babiwale further stressed on the fact that there is increase in the intake for B.Pharm course from 60 to 100 since last year and accommodating the increased number is already a challenge. Mr. Maniar clarified that to cater to the increased intake, some of the classrooms and laboratories are being renovated. He further added that some of the practicals involving hands on training for the B.Sc. programme are proposed to be conducted outside BCP Campus. The others intended to be conducted within the campus will be performed by taking into consideration lab occupancy timings for the B.Pharm course. He added that an exhaustive calendar of activities has been requested to be prepared which will include timelines for academic, finance, administration, and student activities.

Dr. Laddha enquired about what would be the financial gain to BCP by venturing into this program. Mr. Maniar replied that there would be substantial gain in phased manner stating from this year and further two more years when the third year of course would be functional. Dr. Laddha also enquired about the state of the ongoing Course in Clinical research under Academy for Clinical Excellence (ACE). He urged that the past experience of running this course be considered before venturing into said new program.

Mr. Vipul then briefed about the six months, one semester, 30 credits Diploma Program in Health and Integrative Lifestyle (DHL). He added that the programme provides basic understanding of nutrition for a common man with some focus on lifestyle measures. He discussed in detail the eligibility, Program and Course Objectives, Scheme of examination, curriculum framework and the syllabus for the Diploma Program. He added that the program is short and gives more insight on healthy food, balanced nutrition, and disease management through the diet plans.

Dr. Babiwale requested to provide clarity in terms of no. of hours for the program or the individual courses under a program in addition to the no. of credits. Dr. Iyer clarified that for a course with 03 credits, there are 03 hours conducted per week. So, a program with 30 credits is 30 hours per week and as the program is roughly for 15 weeks, the no. of hours come to 450 hours for the DHL Program.

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After discussions and deliberations, the UG-BoS unanimously recommended that the syllabus for the two courses; viz B.Sc. (Hons.) in Integrative Nutrition and Dietetics (3 years course, 6 semesters, 160 credits, CBCGS) and Diploma in Health & Integrative Lifestyle-DHIL (6 months, 30 credits, CBCGS) offered by The Indian Pharmaceutical Association-Maharashtra State Branch's Bombay College of Pharmacy in collaboration with Lifeness Science Institute (LSI), Mumbai be approved and necessary modifications with respect to the detailing of the syllabus may be made as per the recommendation of UG-BoS members.

003.03 To approve the syllabus/module for **Two months Online Certificate course in 'Fundamentals of Global Drug Regulatory Affairs'** offered by Bombay College of Pharmacy and **Pharma Literati** in association with The Indian Pharmaceutical Association-Maharashtra State Branch.

Dr. Iyer introduced Mr. Vijaykumar Shivpuje and mentioned that BCP in collaboration with Pharma Literati had successfully completed a certificate course on Patenting of NDDS and Specialty [505(b)(2)] products in 2021. He then requested Mr. Shivpuje to further elaborate on another collaborative two months Online Certificate Course in 'Fundamentals of Global Drug Regulatory Affairs' which was started on 22nd May 2022.

Mr. Shivpuje explained that the two months certificate course covering 30 hours will be conducted in Online mode on Zoom Platform. He added that the course provides a holistic overview of regulatory affairs and was basically intended to provide only a broader perspective of global drug regulatory affairs. He added that the course was meant only for the beginners who wish to enter into the field of drug regulatory affairs and not for professionals working in the field of regulatory affairs. He explained that UG students in T.Y. or Final Year B.Pharm and PG students were eligible for the course. He added that the course is also recommended for student pursuing Life Sciences and industry professionals who wish to shift their career to regulatory. He explained that the course was designed with 07 modules, the first module being the simplest one and progressively being complex as one reaches the 7th module. He mentioned the USP for the course is an assignment to be provided by the student and inclusion of demonstration of ETCO software. He further explained the contents of each module, highlighting that the modules after the 3rd module focus on industry connect. He added that a lot of practical case studies have been involved to understand the concept better. Mr. Shivpuje mentioned that in future it was planned to conduct an Advanced Course (60 to 70 hours) on Global Drug Regulatory affairs for the regulatory professionals and those who have completed the Fundamental Course. He was happy to share that there were 02 participants from abroad who had enrolled for the course, one from USA and the other from Cyprus, Europe. Further Dr. Manoj Jadhav, a BCP Alumni and Owner of a Drug Discovery company had

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inaugurated the Course. He added that the faculty for the course is mainly from the global regulatory industry and for the current batch half the participants are from the industries mainly, Unichem, Sun Pharma, Dr. Reddy's etc.

Dr. Laddha enquired whether the fees for the course would be sufficient to take care of the expenditures for running the course. Mr. Shivpuje replied that since the course was conducted in an Online manner, the fees was appropriate.

Dr. Babiwale enquired whether the course was being run in any other institute. Mr. Shivpuje replied that the course was specifically designed for running at Bombay College of Pharmacy. He added that there was a similar course run at other institute, however he added that it was more India centric course and was only for UG students, whereas the current course covers three major jurisdictions mainly USA, UK, India and briefly provides exposure to regulatory agencies in more than 120 countries. Dr. Babiwale appreciated the initiative and expressed in affirmation that the students pursuing this cover will get a better edge while entering regulatory industry.

Dr. Alka enquired whether concepts like QbD and PAT for regulatory and regulations for continuous manufacturing have been included in the course. Mr. Shivpuje explained that in continuous manufacturing CGMP has been covered but PAT/QbD being more advanced are not a part of this basic course. He however added that the concept of QbD and PAT can be added in brief to the present course.

Dr. Ratnakar recommended that the course should have a topic on regulatory guidelines for nutraceuticals. Mr. Vijaykumar informed that the last module covers regulatory guidelines for herbal products wherein fssai guidelines have been introduced in brief. Dr. Ratnakar added that phytopharmaceutical guidelines have been now included in DCGI and the course would include in brief how to apply for phytopharmaceutical registration. Mr. Shivpuje agreed that the suggestions would be incorporated in relevant module of the course.

*After discussions and deliberations, the UG-BoS unanimously recommended the syllabus/module for **Two months Online Certificate course in 'Fundamentals of Global Drug Regulatory Affairs'** offered by Bombay College of Pharmacy and **Pharma Literati** in association with The Indian Pharmaceutical Association-Maharashtra State Branch be approved.*

003.05 Any other matter with the permission of the Chair.

Dr. Alka requested permission from the UG-BoS members to add 11 more herbs namely Cinchona, Podophyllum, Galls, Cascara Rhubarb, Mustard, Gentian, Carotene, lutein, Plumbago and henna to the list of phytochemicals provided in the existing T.Y.B. Pharm-Sem V syllabus. She added that this would help to understand phytochemical classification in a better manner. Dr. Ratnakar agreed with the same.

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The UG-BoS members unanimously recommended that addition of 11 new herbs namely Cinchona, Podophyllum, Galls, Cascara Rhubarb, Mustard, Gentian, Carotene, lutein, Plumbago and henna to the list of phytochemicals provided in the existing T.Y.B. Pharm-Sem V syllabus adopted by Bombay College of Pharmacy - autonomous be approved.

As there were no other matters to be discussed, the meeting was concluded with Vote of Thanks to the Chair.

Dr. Krishna Iyer

Dr. Krishna Iyer
I/c Principal and Chairman UG-BoS
Bombay College of Pharmacy-Autonomous

Dr. Ujwala Shinde

Dr. Ujwala Shinde
Head-Department of Pharmaceutics and
Member-Secretary, UG-BoS
Bombay College of Pharmacy-Autonomous

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