

UNIVERSITY OF KERALA
SCHEME AND SYLLABUS
(OUTCOME BASED)

FIRST DEGREE PROGRAMME
IN CHEMISTRY

(BSc)

**UNDER CHOICE BASED
CREDIT AND SEMESTER SYSTEM**

**Core Courses, Foundation Course II,
Open and Elective Courses**

2020 ADMISSION ONWARDS

GUIDELINES FOR PROJECT COURSE (Course Code CH1646)

- The board of examiners can decide the scheme of evaluation of project , study tour report and viva voce
- Topics of chemical interest can be selected for the project. Project is to be done by a group not exceeding 5 students on approval by the teacher in charge.
- Every student should submit typed (A4 paper, 12 Font, 1.5 Space, 20- 30 pages), spirally bind project report duly attested by the supervising teacher and the Head of the Department on the day of practical examination before a board of two Examiners for ESE.
- The viva-voce based on the project is conducted individually.
- Project topic once chosen shall not be repeated by any later batches of students.
- List of projects submitted year wise is to be maintained in a register and submitted before the examiners if necessary.

.The project report may contain the following sections

1. Preliminary (Title page, declaration, certificate of the supervising teacher, content etc.)
2. Introduction with relevant literature review and objective
3. Materials and Methods
4. Results
5. Discussion
6. Conclusion / Summary
- 7.References

STUDY TOUR AND FACTORY VISIT

Students are directed to

- Visit at least one chemical factory preferably within the state of Kerala.
- Submit scientifically prepared hand written study tour report along with photographs of candidate at the places of visit for ESE on the day of the examination of project evaluation.



UNIVERSITY OF KERALA

**Syllabus for
M. Sc. Programme in Branch III
CHEMISTRY**

**(Revised Syllabi under Semester System
with effect from 2020 Admissions)**

PREAMBLE

The syllabi of M.Sc programmes in Chemistry offered in the affiliated colleges of the University under Semester system have been revised and the revised syllabi are to be effective from 2020 admission. There are two independent PG programmes in Chemistry, namely **M.Sc. Programme in Branch III–Chemistry** and **M.Sc. Programme in Branch IV–Analytical Chemistry**. Both these PG programmes are equivalent in all respect for employment and higher studies. Each of these two PG programmes shall extend over a period of two academic years comprising of four semesters, each of 450 hours in 18 weeks duration. The syllabi and scheme of examinations of these two programmes are detailed below. The theory courses of the first three semesters and the practical courses of the first two semesters of the two programmes are common, and therefore, the examinations of these two PG programmes are to be conducted with common question papers for the first three semesters by a common Board of Examiners. These syllabi are effective from 2020 admission in affiliated colleges of the university.

M.Sc. PROGRAMME IN BRANCH III – CHEMISTRY

(Revised syllabus under semester system with effect from 2020 admission)

SYLLABUS AND SCHEME OF EXAMINATION

Course No and Title		Hours per week		Duration of ESA	Marks for CA	Marks for ESA	Total Marks
		L	P				
SEMESTER I*							
CH 211	Inorganic Chemistry I	5		3	25	75	100
CH 212	Organic Chemistry I	5		3	25	75	100
CH 213	Physical Chemistry I	5		3	25	75	100
CH 214	Inorganic Chemistry Practicals I		3	(To be continued in Semester II)			
CH 215	Organic Chemistry Practicals I		3	(To be continued in Semester II)			
CH 216	Physical Chemistry Practicals I		4	(To be continued in Semester II)			
Total marks for Semester I							300
*Distribution of teaching hours/week: Theory–15 hours, Practical's –10 hours							
SEMESTER II*							
CH 221	Inorganic Chemistry II	5		3	25	75	100
CH 222	Organic Chemistry II	5		3	25	75	100
CH 223	Physical Chemistry II	5		3	25	75	100

CH 214	Inorganic Chemistry Practicals II		3	6	25	75	100
CH 215	Organic Chemistry Practicals II		3	6	25	75	100
CH 216	Physical Chemistry Practicals II		4	6	25	75	100
Total marks for Semester II							600
*Distribution of teaching hours/week: Theory–15 hours, Practical’s –10 hours							
SEMESTER III*							
CH 231	Inorganic Chemistry III	5		3	25	75	100
CH 232	Organic Chemistry III	5		3	25	75	100
CH 233	Physical Chemistry III	5		3	25	75	100
CH 234	Inorganic Chemistry Practicals II		3	(To be continued in Semester IV)			
CH 235	Organic Chemistry Practicals II		3	(To be continued in Semester IV)			
CH 236	Physical Chemistry Practicals II		4	(To be continued in Semester IV)			
Total marks for Semester III							300
*Distribution of teaching hours/week: Theory–15 hours, Practical’s –10 hours							
SEMESTER IV*							
CH 241	Chemistry of Advanced Materials	5		3	25	75	100
CH 242 (a)	Inorganic Chemistry IV	5		3	25	75	100
CH 242 (b)	Organic Chemistry IV						
CH 242 (c)	Physical Chemistry IV						
CH 234	Inorganic Chemistry Practicals II		3	6	25	75	100
CH 235	Organic Chemistry Practicals II		3	6	25	75	100
CH 236	Physical Chemistry Practicals II		4	6	25	75	100
CH 243 (a)	Dissertation**					50	50
CH 243 (b)	Visit to R&D Centre					5	5
Comprehensive viva-voce						45	45
Total marks for Semester IV							600
Grand Total (for semesters I – IV)							1800
*Distribution of teaching hours/week: Theory–10 hours, Practical’s –10 hours , 5 hours for discussion on project							

** 10 marks out of the 50 marks for dissertation will be for dissertation viva-voce.

The remaining 40 marks is to be distributed as follows

Introduction to the work/ Statement of the Problem – 5, Review of Literature – 5
 Materials and Methods – 5, Results and Discussion – 15, Language and style of presentation – 2, References – 3, Quality and Innovation – 5.

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1.

UNIVERSITY OF KERALA

REVISED SYLLABI FOR

FIRST DEGREE PROGRAMME IN

PHYSICS

UNDER

CHOICE BASED-CREDIT & SEMESTER-

SYSTEM (CBCSS)

(2018 admission onwards)

Total=
80
marks

V. OPEN/ELECTIVE COURSES

During the programme the students have to undergo two open/elective courses. The students attached to the Physics department can opt one course from the Physics department (Elective course) and the other from any one of the other departments (Open course). The student has to do the open course during the fifth semester and the elective course during the sixth semester. As a beginning, the department will choose one open course for the fifth semester and one elective course for the sixth semester depending on the faculty and infrastructure available.

(a). Open Courses.

i) Bio-Physics ii) Astronomy & Astrophysics iii) Applied Physics
iv) Environmental Physics v) Energy Physics

(b). Elective Courses.

i) Photonics ii) Nano science iii) Computer hardware and networking iv)
Instrumentation v) Space Science

VI. IMPLEMENTATION OF PROJECT WORK AND STUDY

TOUR(RESEARCH INSTITUTE/SCIENCE MUSEUM VISIT)

As part of study the candidate has to do a project work. The aim of the project work is to bring out the talents of students and to introduce research methodology. The work may be chosen from any branch of Physics, which may be experimental, theoretical or computational. Emphasis should be given for originality of approach. The project shall be done individually or as a group of maximum 5 students. The projects are to be identified during the 4th semester with the help of the supervising teacher. The report of the project (of about 30-40 pages) in duplicate shall be submitted to the department by the end of the 6th semester well before the commencement of the examination. The reports are to be produced before the external examiners appointed by the University for valuation.

STUDY TOUR

Students are directed to visit one research institute /science museum preferably within the state of Kerala. Scientifically prepared hand-written study tour report must be submitted by each student for ESE on the day of the examination of project evaluation.

VII. CONTINUOUS EVALUATION

There will be continuous evaluation (CE) based on continuous assessment and end semester examination (ESE) for each course. CE carries 20 marks based on specific components such as attendance, tests, assignments, seminars etc. and ESE 80 marks. Out of the 20marks in internal assessment, 5marks shall be given to attendance, 10 marks to test papers, 5marks to seminar / assignments (minimum one test & one assignment). The components of the internal evaluation for theory and practical and their marks are given below.

Learning Outcomes-based Curriculum Framework

(LOCF) for Post-graduate Programme

**Name of the Programme: M.A. Behavioural Economics &
Data Science**

(Syllabus effective from 2020 Admission)

University of Kerala

MA Behavioural Economics and Data Science

Seme ster	Paper Code	Title	Hours per semester	Instructor hours per week	ESA	Maximum Marks		
						Hours	CA	ESA	Total
I	BEDS-CC- 211	Micro Economic theory	110	6	3	25	75	100
	BEDS-CC- 212	Macro Economic theory	110	6	3	25	75	100
	BEDS-CC- 213	Quantitative Tools for Behavioural Economics	120	7	3	25	75	100
	BEDS-CC- 214	Principles of Cognitive Economics	110	6	3	25	75	100
II	BEDS-CC- 221	Foundations in Behavioural Micro-Economics	110	6	3	25	75	100
	BEDS-CC- 222	Foundations in Behavioural Macro-Economics	110	6	3	25	75	100
	BEDS-CC- 223	Foundations of Data Science	110	6	3	25	75	100
	BEDS-CC- 224	Basic Econometrics and Research Methodology	120	7	3	25	75	100
III	BEDS-CC- 231	Applied Behavioural Economics	120	7	3	25	75	100
	BEDS-CC- 232	Experimental Economics- Methods and Application	110	6	3	25	75	100
	BEDS-CC- 233	Game Theory	110	6	3	25	75	100
	BEDS-DSE- 234 or BEDS-DSE- 235	Advanced Econometrics Data Analytics for Business	110 110	6 6	3 3	25 25	75 75	100 100
IV	BEDS-CC- 241	Basics of Behavioural Finance	110	6	3	25	75	100
	BEDS-CC- 242	Behavioural Economics and Policy Design	110	6	3	25	75	100
	BEDS-CC- 243	Foundations of Data Analysis Using R and Python	120	7	3	25	75	100
	BEDS-DSE- 244 or BEDS-DSE- 245	Behaviour Economics and Public Health	110	6	3	25	75	100
		Behaviour Economics and Tourism	110	6	3	25	75	100
	BEDS-D- 225	Behavioural and Data Science						100

	Project /Internship						
	Viva Voce						100
	Total						1800

Programme Specific Outcomes (PSO) for M.A. Behavioural Economics & Data Science

PSO1 To equip students with Basic and advanced knowledge in economic theories, Behavioural Economics and Data Science

PSO2 To familiarise the students with various aspects of applied econometrics, data management & cognitive economics

PSO3 To make the students capable of addressing and solving the issues in the society and the economy by acquiring greater insight in the behaviour of economic agents and data management they have acquired

PSO 4 To create academic excellence through holistic education.

PSO 5 To develop right skills in students catering to the needs of the industry and policy makers

BEDS-D- 225: Behavioural and Data Science Project/Internship

Course Outcome

The objective of project/Internship is to develop research aptitude and skills among the students. Students produce a well structured dissertation work meeting standard requirements of academic writing.

Dissertation Format

General Guidelines

1. Selection of a Topic
2. Pilot study, if needed
3. Review of Literature
4. Research Gap (Optional for PG)
5. Statement of research Problem
6. Research objectives
7. Hypotheses (Optional for PG)
8. Methodology-Theoretical framework (Optional for PG), Conceptual Framework – precise and specific meaning of the terms / concepts /variables, Coverage (Universe/ Sample & period of study),Data source (Primary/Secondary), Tools of analysis
9. Significance of the Study and its social relevance.
- 10. Chapter outlines**
 - i. Introductory Chapter
 - ii. Background Chapter
 - iii. Analysis Chapters
 - iv. Conclusion Chapter
11. Appendices
12. References

Mark Distribution:

Introduction - 10%

Review of literature and Research Gap - 10%

Statement of the research Problem, Objectives and Methodology-20%

Analysis and establishment of objectives -50%

Conclusion & Bibliography-10%

Structure of the Report

A. Title Page/ Cover Page

- a. Title page
- b. Title of the project
- c. Name of the candidate/candidate code
- d. Degree for which project is submitted.
- e. Name of

the college

f. Month and year the project is presented

B. Declaration of the student

C. Certificate of the supervising teacher

D. Acknowledgments

E. Table of contents

a. List of Tables

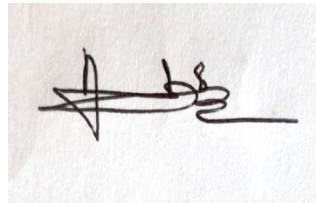
b. List of Figures

c. Glossary

d. List of abbreviations

Length of the Project

1. Report length 50 to 60 pages excluding Appendix and Certificates
2. Alignment : Justify
3. Font :Times New roman
4. Font size : 12
5. Line spacing : 1.5



Kariavattom

11/10/2020

Prof.(Dr.) ABDUL SALIM, A

Chairman, Board of Studies In Economics(PG),

University of Kerala

UNIVERSITY OF KERALA

Revised Syllabus for

M.Sc Degree Programme in Physics

(With effect from 2018 admissions)

UNIVERSITY OF KERALA

M.Sc Degree Programme (effective from 2018 - 19)

Branch II PHYSICS

A: COURSE STRUCTURE & MARK DISTRIBUTION

Semester	Paper Code	Title of Paper	Contact hours per week			UE duration (h)	Maximum mark		
			L	T	P		IA	UE	Total
I	PH 211	Classical Mechanics	6	1	...	3	25	75	100
	PH 212	Mathematical Physics	6	1	...	3	25	75	100
	PH 213	Basic Electronics	6	1	...	3	25	75	100
	PH 251	General Physics Practicals	...	1	3	...	...	...	...
	PH 252	Electronics & Computer Science Practicals	...	1	4	...	...	...	...
		Total for Semester I (S1)		18	5	7	...	75	225	300
II	PH 221	Modern Optics & Electromagnetic theory	6	1	...	3	25	75	100
	PH 222	Thermodynamics, Statistical Physics & Basic Quantum Mechanics	6	1	...	3	25	75	100
	PH 223	Computer Science & Numerical Techniques	6	1	...	3	25	75	100
	PH 251	General Physics Practicals	...	1	3	6	25	75*	100
	PH 252	Electronics & Computer Science Practicals	...	1	4	6	25	75*	100
		Total for Semester II (S2)		18	5	7	...	125	375	500

III	PH 231	Advanced Quantum Mechanics	6	1	...	3	25	75	100
	PH 232	Advanced Spectroscopy	6	1	...	3	25	75	100
	PH 233 X	Special Paper I	6	1	...	3	25	75	100
	PH 261	Advanced Physics Practicals	...	1	4	...	...	...	...
	PH 262	Advanced Electronics Practicals	...	1	3	...	...	...	...
		Total for Semester III (S3)		18	5	7	...	75	225	300
	PH 241	Condensed Matter Physics	6	1	...	3	25	75	100
	PH 242	Nuclear & Particle Physics	6	1	...	3	25	75	100
	PH 243 X	Special Paper II	6	1	...	3	25	75	100
	PH 261	Advanced Physics Practicals	...	1	3	6	25	75*	100

IV	PH 262	Advanced Practicals	Electronic s	...	...	4	6	25	75*	100
	PH 201	Project		...	...	...	...	25	75	100
	PH 202	Viva Voce		...	...	...	...	...	100	100
		Total for Semester IV (S4)		18	5	7	...	150	550	700
Grand Total				72	20	28	...	425	1375	1800

* 10 marks for records

X: E (Electronics), M (Materials Science)

L - Lecture IA - Internal
Assessment

N (Nuclear Physics), S (Space Physics)

T - Tutorial UE - University
Exam

T (Theoretical Physics)

P - Practical

C-3 Special papers

Depending on the expertise and facilities available in a College (with approval of the University and Government as per rules) one of the five Specialisations (Special paper Category) may be chosen by a student for the third and fourth semesters of the M.Sc Programme in Physics. At present for all specialisations, practical courses are common.

C4-Project work and Project Evaluation

The Project may be started during the second semester of the M.Sc programme.

25 marks of the project are to be awarded on the basis of internal assessment carried out in the College for each student concerned. A Project rough record may be maintained by each student to help to evaluate the progress of the project. Each student is required to present the completed project along with experimental demonstration if any in the college before the final University examinations in the Fourth Semester of the MSc (Physics) Programme.

For University Examinations for the Project: 50 marks is allotted for Project report evaluation and 25 marks allotted for Project based Viva Voce to be conducted along with General Viva Voce examination by the University.

D Pattern of University Question papers

D-1 Theory Papers

Each question Paper has three parts: Part A, Part B and Part C

Part A: Eight short answer questions covering the entire syllabus. *One of the questions from this section may be used to test the CURRENT AWARENESS (general knowledge) of the student in the areas of syllabus covered for this paper.* Each question carries 3 marks.

Part B: contains three compulsory questions with internal choice. Questions cover all the three units in the syllabus. Each question carries 15 marks.

Part C: contains six problems covering the entire syllabus. The student needs to answer any three. Each question carries five marks.

The question paper pattern for the theory papers is given separately.

D-2 PRACTICALS

Each practical paper carries a total of 75 marks. 10 marks are allotted for practical records.

PH 252: Electronics and Computer Science: Unit A-Electronics practical (4h, 45 marks)

Unit B- Computer Science (2h, 20 marks)

Board of Studies in Mathematics (UG)
UNIVERSITY OF KERALA

First Degree Programme in
MATHEMATICS
under Choice Based Credit and Semester System

SYLLABUS
for 2018 admission onwards

STRUCTURE OF CORE COURSES

Sem	Course Code	Course title	Instr.hrs. per week	Credit
I	MM 1141	Methods of Mathematics	4	4
II	MM 1221	Foundations of Mathematics	4	3
III	MM 1341	Elementary Number Theory and Calculus – I	5	4
IV	MM 1441	Elementary Number Theory and Calculus – II	5	4
V	MM 1541	Real Analysis – I	5	4
	MM 1542	Complex Analysis – I	4	3
	MM 1543	Abstract Algebra – Group Theory	5	4
	MM 1544	Differential Equations	3	3
	MM 1545	Mathematics Software – L ^A T _E X & SageMath (Practical Examination Only)	4	3
	MM 1551	Open Course	3	2
	—	Project preparation - From selecting the topic to presenting the final report	1	
VI	MM 1641	Real Analysis – II	5	4
	MM 1642	Complex Analysis – II	4	3
	MM 1643	Abstract Algebra – Ring Theory	4	3
	MM 1644	Linear Algebra	5	4
	MM 1645	Integral Transforms	4	3
	MM 1651	Elective Course	3	2
	MM 1646	Project		4

STRUCTURE OF OPEN COURSES

Sem	Course Code	Course title	Instr.hrs. per week	Credit
V	MM 1551.1	Operations Research	3	2
V	MM 1551.2	Business Mathematics	3	2
V	MM 1551.3	Basic Mathematics	3	2

Semester V

Project preparation - From selecting the topic to presenting the final report

Instructional hours per week: 1

To complete the undergraduate programme, the students should undertake a project and prepare and submit a project report on a topic of their choice in the subject mathematics or allied subjects. The work on the project should start in the beginning of the 5th semester itself, and should end towards the middle of the 6th semester. This course (without any examination in the 5th semester, with a project report submission and project viva in the 6th semester) is introduced for making the students understand various concepts behind undertaking such a project and preparing the final report. Towards the end of this course the students should be able to choose and prepare topics in their own and they should understand the layout of a project report.

To quickly get into the business, the first chapter of text [1] may be completely discussed. Apart from that, for detailed information, the other chapters in this book may be used in association with the other references given below. The main topics to discuss in this course are the following:

Quick overview : The structure of Dissertation, creating a plan for the Dissertation, planning the results section, planning the introduction, planning and writing the abstract, composing the title, figures, tables, and appendices, references, making good presentations, handling resources like notebooks, library, computers etc., preparing an interim report.

Topics in detail : Planning and Writing the Introduction, Planning and Writing the Results, Figures and Tables, Planning and Writing the Discussion, Planning and Writing the References, Deciding On a Title and Planning and Writing the Other Bits, Proofreading, Printing, Binding and Submission, oral examinations, preparing for viva, Taking the Dissertation to the Viva

Layout : Fonts and Line Spacing, Margins, Headers, and Footers, Alignment of Text, Titles and Headings, Separating Sections and Chapters

Texts

Text 1 – Daniel Holtom, Elizabeth Fisher. *Enjoy Writing Your Science Thesis or Dissertation – A step by step guide to planning and writing dissertations and theses for undergraduate and graduate science students*, Imperial College Press

References

Ref. 1 – Kathleen McMillan, Jonathan Weyers. *How to write Dissertations & Project Reports*, Pearson Education Limited

Ref. 2 – Peg Boyle Single. *Demystifying dissertation writing : a streamlined process from choice of topic to final text*, Stylus Publishing, Virginia

FACULTY OF COMMERCE

*Scheme and syllabus for the **First Degree Programme in Commerce** under the Choice Based Credit and Semester System (CBCS)(To be introduced from 2018admissions)*

The First Degree Programme in Commerce is designed with the objective of equipping the students to cope with the emerging trends and challenges in the industrial and business world.

I. Eligibility for admission

Eligibility for admissions and reservation of seats for the First Degree Programme in Commerce shall be according to the rules framed by the University from time to time. No student shall be eligible for admission to the First degree Programme in Commerce unless he/she has successfully completed the examination conducted by a Board/ University at the +2 level of schooling or its equivalent.

II. Registration

Each student shall register for the courses in the prescribed registration form in consultation with the Faculty Advisor within two weeks from the commencement of each semester.

III. Duration

The normal duration of the First Degree Programme in Commerce shall be three years consisting of six semesters. The duration of each semester shall be five months inclusive of the days of examinations. There shall be at least 90 working days in a semester and a minimum 450 hours of instruction in a semester. Odd Semester (June-October) commences in June and Even Semester (November – March) commences in November every Year.

IV Programme Structure

The First Degree Programme in Commerce shall include:

1. Language courses
2. Foundation courses
3. Core courses
4. Complementary courses
5. Open/ Elective courses
6. Project

Language courses include 4 common courses in English and 2 courses in an additional language chosen by the student. The student shall choose any one of the following additional languages offered in the college: Malayalam, Hindi, Tamil, French, German, Russian, and Arabic.

Foundation courses include 2 courses which are compulsory basic courses. Foundation course I aims at providing awareness on the methodology of business education and foundation II aims at providing basic education on general informatics and cyber laws.

Core courses include 16 compulsory courses in the major subject and complementary courses include 4 courses in the allied subjects.

There shall be two open courses. The students attached to the Department of Commerce can opt one course from their Department and another from any one of the other Departments in the college. The open course (1) in the 5th semester is a non- major elective open to all students except to the students from the Department of Commerce and the open course (2) in the 6th semester is an elective course in the major subject offered to the students of the Department of Commerce. In addition to the 2 open courses, the students shall choose any one of the additional elective streams with 4 courses in each stream, which is also compulsory as part of the First Degree Programme in Commerce.

Project Work:

Every student is required to undertake a project **either individually or in a group of not more than 5 under the supervision of a teacher** and a report of the same have to be submitted at least 15 days before the commencement of 6th end semester examination. The project work may commence in the 5th semester. The project can be done by using either primary data or secondary data. The topics shall either be allotted by the supervising teacher or be selected by the students in consultation with the supervising teacher.

The project work shall have the following stages:

- a. Project proposal presentation and preliminary study- **5th semester**
- b. Field work and data analysis –**6th Semester**
- c. Report writing, presentation and Final report Submission–**6th Semester**

The Report shall be printed and spiral bound with not less than 50 A4 size pages. The layout of the report is

Font : Times New Roman; Size : 12; Line Space : 1.5
 Margin : Left – 1.25, Right – 1, Top – 1, Bottom – 1 (all in inches)

Structure of the Report

1. Title Pages
2. Certificate of Supervising Teacher with signature and counter signed by Head of the Department
3. Contents
4. List of Tables and Charts
5. Chapter I – Introduction, Review of Literature, Statement of the Problem, Need and Significance of the study, Objectives, Methodology and Chapterisation scheme (5-8 pages)
6. Chapter II - Theoretical Background and Secondary data (10-15 pages)
7. Chapter III – Data analysis and Interpretation
8. Chapter IV – Summary of Findings, Suggestions and Conclusion
9. Appendix – Questionnaire, Specimen copy of forms, other exhibits etc.
10. Bibliography – Source of secondary data – Books, Journals, Websites etc.

The student secures the credits assigned to a course on successful completion of the course. The student shall be required to earn a minimum of 120 credits including credits for language courses, foundation courses, core courses, complementary courses (as the case may be), project and open/ elective courses within a minimum period of six semesters for the award of the Degree excluding credits required for social service/ extension activities. The minimum credits required for different courses are given below:

Courses	Credits
Language courses	22
Foundation courses	5
Core courses including project	61
Complementary courses	12
Open/ elective courses	<u>20</u>
120	

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Social Service/ Extension activities 1

General Structure for the First Degree Programme in Commerce

Sem No.	Courses	Instructi onal	Credits	Uty Exam	Evaluati on	Total credits
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UNIVERSITY OF KERALA

Revised Scheme & Syllabus for First Degree Programme in

B A ECONOMICS (CBCS SYSTEM) 2019

Semester I

Credits	Instructional hours	Course Title	Course No	Sem No
4	5	(Language Course I (English I	EN 1111	I
3	4	Language Course II (Addl (Language I	1111	
2	4	Foundation Course I	EN 1121	
4	6	Core I Introductory Micro Economics	EC 1141	
2	3	Complementary I	1131	
2	3	Complementary II	1131	
20	25	Total		

Semester II

Credits	Instructional hours	Course Title	Course No	Sem No
4	5	(Language Course III (English II	EN 1211	II
3	4	(Language Course IV (English III	1212	
3	4	(Language Course V (Addl. Lang II	1211	

4	6	Core II Intermediate Microeconomics	EC1241	
3	3	Complementary III	1231	
3	3	Complementary IV	1231	
20	25	Total		

Semester III

Credits	Instructional hours	Course Title	Course No	Sem No
4	5	(Language Course VI (English IV	EN 1311	III
4	5	(Language Course VII (Addl.Lan III	1311	
3	4	Foundation Course II Informatics for Applied Econometrics	EC1321	
4	5	Core III Introductory .Macroeconomics	EC1341	
3	3	Complementary V	1331	
3	3	Complementary VI	1331	
21	25	Total		

Semester IV

Credits	Instructional hours	Course Title	Course No	Sem No
4	5	(Language Course VIII (English V	EN1411	IV
4	5	(Language Course IX (Addl.Lan IV	1411	
4	5	Core IV Mathematical Methods for Economics	EC1441	
3	4	Core V Intermediate Macroeconomics	EC1442	
3	3	Complementary VII	1431	
3	3	Complementary VIII	1431	
21	25	Total		

Semester V

Credits	Instructional hours	Course Title	Course No	Sem No
4	4	Core VI Methodology and Perspectives of Social Science	EC1541	V
4	4	Core VII Statistical Methods for Economics	EC1542	
4	4	Core VIII Readings in Political Economy	EC1543	
2	3	Core IX Economic Growth and Development	EC1544	

3	4	Core X International Economics	EC1545	
2	3	Open Course I – Introductory Economics	EC1551.1	
2	3	Human Resource Management	EC1551.2	
2	3	Indian Economy Since Liberalisation	EC1551.3	
-	3	Project / Dissertation		
20	25	Total		

Semester VI

Credits	Instructional hours	Course Title	Course No	Sem No
4	5	Core XI Indian Economy	EC1641	VI
4	4	Core XII Banking and Finance	EC1642	
4	5	Core XII Public Economics	EC1643	
3	4	Core XII Environment Economics and Disaster Management	EC1644	
2	4	Elective : Kerala Economy	EC1661.1	
2	4	Mathematical Economics	1661.2	
2	4	Introductory Econometrics	1661.3	
2	4	History of Economic Thought	1661.4	
3	3	Project/Dissertation	EC 1645	
21	25			
120	150	Grand Total		

:Complementary Courses Offered

Complementary I

EC 1131 Foundations of Economic Theory

Complementary III

EC 1231 Money and Banking

Complementary V

EC 1331 Introduction to International trade and Public Economics

Complementary VII

EC 1431 Indian Economy Since Independence

- Goddanti Omkarnath (2016): 'Indian Development Thinking' from Handbook of alternative theories of economic development Edited by Erik S. Reinert, Jayati Ghosh and Rainer Kattel .2
- Dasgupta, Ajit K. (1993): A History of Indian Economic Thought, Routledge, London .3
- Lokanathan, V (2013): A History of Economic Thought, S.Chand & Company Ltd, New Delhi .4
- Additional Reading
- Rangarajan, L.N. (2001): Kautilya – The Arthashastra, Penguin Books India Pvt. Limited, New Delhi .1
- Singh, V.B. (1975): From Naoroji to Nehru – Six Essays in Indian Economic Thought, The Macmillan Company of India Limited, New Delhi .2
- Ajit K. Dasgupta, Gandhi's Economic Thought, Routledge, London. Year .3
- Blaug, Mark, (1997) Economic Theory in Retrospect, 5th Edition, Cambridge University Press, Cambridge, UK .4

EC 1645 Project

No of Credits : 4 Instructional Hours : 6 (3 Hours each in V and VI Semester)

As part of the requirements for BA Programme , every student must do a project either individually or as a group under the supervision of a teacher. The project is expected to equip the student to identify an issue or topic and conduct the study in a systematic and scientific way. Students will get the opportunity to apply various tools they have learned and present the report in a structured manner

Guidelines

Project work may be done individually or as a group (Maximum 5 students). The topic selected should be related to theory or economic issues. The work may use primary or secondary source of data. It should be typed in 35- 60 pages with spiral binding. The printing has to be in paper A4, with Times New Roman font 12 for content and 14 for titles with a line spacing 1.5. The guidance for doing the project has to be given in the V Semester and VI Semester. Three instructional hours in each semester have been provided for this purpose

The area of study should be finalized in the V Semester and final report should be submitted at .3
.the end of the VI semester

A pre submission Seminar should be undertaken in the VI Semester for reviewing nature and .4
quality of the project work. The supervising teacher should ensure that the work is not a
.reproduction of any work conducted earlier

Students should be given classes on research methodology before the commencement of the .5
.project work

: The project Work shall contain the following .6

An Acknowledgement of the student and declaration certificate of the Supervising
. teacher

Introduction and Review of literature

Methodology

Analysis

.Conclusions and Suggestions if any

.Bibliography

Evaluation Indicators .7

% - 10 Introduction and Review of Literature

- 20% Methodology

- 40% Analysis

% - 20 Conclusions and Suggestions if any.

- 10% Bibliography.

Study Tour

A compulsory study tour is recommended as part of the paper entitled Economic growth
and Development in the fifth semester. A report of the tour should be submitted to the head of the
.Department after the completion of the tour

Complementary I

EC 1131 FOUNDATIONS OF ECONOMIC THEORY