### COURSES OFFERED

The college offers the following programmes under the University of Kerala.

#### UNDERGRADUATE PROGRAMMES

B.A/ B.Sc./ B.Com. Courses of FIRST Degree Programme under Choice Based Credit and Semester System (CBCSS).

SI. No.	B.A	B.Sc.	B.Com.
1.	English	Mathematics	Commerce
2.	Malayalam	Physics	
3.	Hindi	Chemistry	
4.	Economics	Botany	
5.	Phychology	Zoology	
6.	Sociology		
7.	History		

#### POSTGRADUATE PROGRAMMES

### M.A / M.Sc. /M.Com Courses under Semester System

SI. No.	M.A	M.Sc.	M.Com
1.	English	Mathematics	Commerce
2.	Malayalam	Physics	
3.	Hindi	Chemistry	
4.	Economics	Botany	
5.		Zoology	

### FIRST DEGREE PROGRAMME STRUCTURE

### Semester

Semester means a term consisting of 90 working days distributed over a minimum period of 18 week.

### Course

Course means a portion of a subject to be taught and evaluated in a semester. A

course of 4 credits will meet a minimum of 4 hours per week and treated as full course. A semi course one credit will meet at least one hour per week in a semester.

### Language course

Students who join for any B.A/B.Sc. programme have to study five course in English and four courses in additional language. The additional languages offered are Malayalam, Hindi, Sanskrit and Russian. Those who join for B.Com. programme have to study 4 courses English and 2 courses in additional language.

#### Foundation Course

Students who join B.A/B.Sc. programmes have to study one course under language and one course under core. For B.Com. programme students have to take up both the foundation courses under the core subject.

#### Core Course

Core course means compulsory course in a main subject related to the First Degree Programme (FDP) in a discipline. Students who join for B.A/B.Sc. programmes have to study compulsory 12-15 course courses and submit one dissertation/project report. For B.Com. programme a student has to attempt 16 core courses and submit one dissertation/project work.

### Complementary Courses

Complementary course means a course in a subject other than the major subject and is complementary to the main subject. Students who join for B.A/B.Sc. programmes have to study 8-10 complementary courses while for B.Com. programme a student has to choose 4 complementary courses.

### Open/Elective Course

Students who join for B.A/B.Sc. programmes have to study two courses to a minimum of 4 credits and for B.Com., a student has to study 6 courses to a minimum of 20 credits. Open course means an optional course which the student is free to take at his/her will. Elective course means a specialized course from the frontier area of core subject.

### Audit Courses

Courses which students can register without earning credits (Zero credit course) and are not compulsory for completing the degree programme. Courses for more than the stated number of credits (120) may be obtained through the audit courses.

### Repeat Course

Repeat Course is a course that a student repeats if he/she has failed in it. Repeat courses are possible with the next batch for failed candidates. Students who completes the semester, by securing the minimum required attendance and by registering for ESE of each semester alone shall be promoted to higher semester. Students who fail to secure minimum required aggregate attendance during a semester shall be given one or more chances to repeat the semester along with the subsequent batch of students after obtaining re-admission subjected to the condition that the candidate has to complete the programme in not more than 12 continuous semesters and that the candidate has to appear for CE afresh each time.

#### Credit

Credit of a course measure of weekly unit of work involving lecture or laboratory session or seminar or similar activity designed for the course. Each credit hour is roughly equivalent to one hour of class time per week in a semester.

#### Attendance

As per the revised order No. Ac. A V/1/UG Sem/2013 dt 11/07/2014, the allotment of marks for attendance is as follows

Attendance	Marks
Less than 51%	0
51-60%	1
61-70%	2
71-80%	3
81-90%	4
91-100%	5
1	

### B.A/B.SC. FIRST DEGREE PROGRAMME Language Course and Foundation Course & Addl. Language For Semester I-IV

Sem. No.	Course code	Course Title
I	EN 1111.1 EN 1121 ML 1111.1 HN 1111.1 SK 1111.1 RU 1111.1	Listening, speaking and Reading Writings on Contemporary Issues മലയാള കവിത Prose and grammar Drama Grammar and Prose
П	EN 1211.1 EN 1212.1 ML 1211.1 HN 1211.1 SK 1211.1 RU 1211.1	Environmental studies Modern English Grammer & Usage ഗദൃസാഹിതൃം Fiction Creative Writing & Communication skill Kavya & Prakarana in Sanskrit Pross and Composition
Ш	EN 1311.1 ML 1311.1 HN 1311.1 SK 1311.1 RU 1311.1	Writing and Presentation Skill ദൃശ്യകലാസാഹിത്യം Drama Oneact Plays & Translation Kavya Nataka, Alankara, Vritta Prose and Translation
IV	EN 1411.1 ML 1411 HN 1411.1 SK 1411.1 RU 1411.1	Readings in Literaturehn വിനിമയം സർഗാത്മകചേന ഭാഷാവബോധം Poetry long Poems and Culture Influence of Sanskrit on Indian Culture Poetry selections from Russian and Soviet Poets

### B.Com. language Courses

Sem.	Course code	Course Title
No.		
I	EN 1111.2	Listening, speaking and Readingt
	ML 1111.1	നോവൽ, നാടകം, സഞ്ചാര സാഹിത്യം
	HN 1111.1	Prose Commercial Hindi & Letter Writing
		Grammar & Translation
	SK 1111.3	Kavya and Drama
	RU 1111.2	Grammar and Translation

I	EN 1211.2	Modern English Grammar & Usage	
	ML 1211.2	കവിത, കഥ, ഉപന്യാസം, വിവർത്തനം	
	HN 1211.2	Poetry Translation Technical	
		Terminology & Communication	
	SK 1211.3	Prose and Fable in Sanskrit	
	RU 1211.2	Prose and Composition	
Ш	EN 1311.2	Writing and Presentation Skill	
IV	EN 1411.2	Readings in Literature	

# B.A English (Subject code 130)

Sem No.	Course Code	Course Title
I	EN 1111.1 EN 1121 EN 1141 EN 1131 compl ISG 1135 compl	Listening, Speaking and reading Additional Language Writing on Contemporary Issues Reading Poetry History of English Literature 1 Introduction to Sociology
I	EN 1211.1 EN 1212.1- EN 1241 EN 1231 compl SG 1235 compl	Environmental Studies Modern English grammar and Usage Addl. Lang 2 Reading Drama History of English Literature 2 Political Sociology
Ш	EN 1311.1 EN 1341 EN 1342 EN 1331 compl SG 1335 compl	Writing and Presentation skills Additional Language 3 Reading Fiction 20 <sup>th</sup> Century Malayalam Literature in English Translation History of English Literature 3 Social Gerontology
IV	EN1441.1 EN 1441 EN 1421 EN 1431 compl SG 1435 compl EN 1431.3	Readings in Literature(Additional Language 4) Reading Prose Foundation Course 2 : Informatics Complementary Course 7 : History of English Language Women and Society English for Media

٧	EN 1541 EN 1542 EN 1543 EN 1544 EN 1545 EN 1551.	Literary Criticism Indian Literature in English Film Studies Linguistics and Phonetics Post Colonial Literatures in English Communicative applications in English
VI	EN 1641 EN 1642 EN 1643 EN 1644 EN 1661.1 EN 1645	World classics Methodology and perspectives of Humanities English for the Media Women's Writing Translation Studies (Elective Course) Project

# M.A English

Sem	Paper Code	Name of paper	CA	ESA	Total
I	EL 211	Chaucer to the Elizabethan Age	25	75	100
	EL 212	Shakespeare	25	75	100
	EL 213	The Augustan Age	25	75	100
	EL 214	The Romantic Age	25	75	100
I	EL 221	The Victorian Age	25	75	100
	EL 222	The 20th century	25	75	100
	EL 223	Indian Writing in English	25	75	100
	EL 224	Literary Theory 1	25	75	100
Ш	EL 231	Linguistics & Structure of the			
		English Language	25	75	100
	EL 232	Literary Theory 2	25	75	100
	EL 233	European Drama	25	75	100
	EL 233	Women's Writing	25	75	100
IV	EL 241	English Language Teaching	25	75	100
	EL 242	Introduction to Cultural Studies	25	75	100
	EL 243	European Fiction	25	75	100
	EL 243	American Literature	25	75	100
	EL 244	Comprehensive Paper			100
	EL 245	Project & Project based Viva Voce			100

## B.A Malayalam (Subject Code 115)

Sem. No.	Course code	Course Title
I	ML 1141 ML 1131 SK 1131.2	നോവൽ-ചരിത്രവും പാഠവും കേരള സംസ്കാരം ഭാഗം I Sanskrit I Poetry and Drama I (compl)
П	ML 1241 ML 1231 SK 1231.2	നാടകം-ചരിത്രം, പാഠം, പ്രയോഗം കേരള സംസ്കാരം ഭാഗം II Sanskrit II Poetry and Drama II (compl)
Ш	ML 1321 ML 1341 ML 1331 SK 1331.2	ആധുനിക സാങ്കേതിക വിദ്യയും മലയാള ഭാഷാ പഠനവും സാഹിത്യ സിദ്ധന്താങ്ങൾ–പൗരസ്ത്യവും പാശ്ചാത്യവും പരിസ്ഥിതി സിദ്ധാന്തവും ആവിഷ്കാരവും Sanskrit III Drama and grammar (compl)
IV	ML 1441 ML 1442 ML 1431 SK 1431.2	മലയാള കവിത– പൂർവ ഘട്ടം മലയാള സഹിതൃ നിരൂപണം ദളിതെഴുത്ത് പെണ്ണെഴുത്ത്–സിദ്ധാന്തവും ആവിഷ്കാരവും Sanskrit I V Lyric Poem, Fables and Translation (compl)
V	ML 1541 ML 1542 ML 1543 ML 1544 ML 1545	ഭാഷാശാസ്ത്രം ഭാഷാചരിത്രം ചെറുകഥാ പഠനം നാടോടി വിജ്ഞാനീയം ജീവചരിത്രം, ആത്മകത, യാത്രാനുഭവം ചലച്ചിത്രപഠനം
VI	ML 1641 ML 1642 ML 1643 ML 1644 ML 1661.4	മാധ്യമ ലോകം മലയാള വ്യാകരണം മലയാളകവിത– ഉത്തരഘട്ടം വിവർത്തനം–സിദ്ധാന്തവും പ്രയോഗവും തിരക്കഥാ രചന:തത്ത്വവും പ്രയോഗവും

## M.A Malayalam

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Sem	Paper Code	Name of paper	CA	ESA	Total
I	ML 211	പ്രാചീന സാഹിത്യം	25	75	100
	ML 212	മദ്ധ്യകാല സാഹിത്യം	25	75	100
	ML 213	കേര്ള സംസ്കാരം	25	75	100
	ML 214	മലയാള വ്യാകരണം			
		ഗവേഷണരീതിശാസ്ത്രം	25	75	100
II	ML 221	ആധുനിക സാഹിത്യം ഗദ്യം	25	75	100
	ML 222	ആധുനിക സാഹിത്യം പദ്യം	25	75	100

	ML 223 ML 224	സാഹിതൃമീമാംസ–പൗരസ്തൃം സാഹിതൃ മീമാംസ–പാശ്ചാത്യം	25	75	100
		ഗവേഷണരീതിശാസ്ത്രം	25	75	100
Ш	ML 231	സമകാലിക സാഹിത്യം-ഗദ്യം	25	75	100
	ML 232	വിവർത്തനം തത്താവും പ്രയോഗവും	25	75	100
	ML 233	Sanskrit Paper I	25	75	100
	ML 234	മലയാള വിമർശനം	25	75	100
IV	ML 241	സമകാലിക സാഹിത്യം–പദ്യം	25	75	100
	ML 242	Sanskrit Paper II	25	75	100
	ML 243	ആധുനിക ഭാഷാശാസ്ത്രം	25	75	100
	ML 244	ഐച്ഛികം (തിരക്കഥാ പഠനം)	25	75	100
		Dessertation Comprehensive viva	25	75	100 100

B.A Hindi (Subject Code 125)

Sem	Course Code	Course Title
I	HN 1141 Core 1 HN 1131 (Compl I) HN 1132 (Compl II)	Hindi Prose Secretarial practice & Official correspondence in Hindi History of India Medieval and Modern Period
II	HN 1241 Core 2 HN 1231 (Compl III) HN 1232 (Compl IV)	History of Hindi Literature upto Ritikal Special Author Kabeer Das Literary Creation and Transformation
Ш	HN 1341 Core 3 HN 1331 (Compl V) HN 1332 (Compl VI)	History of Hindi Literature Modern Period Comparative Literature with special Reference to Hindi and Malayalam Development of Hindi as official language and Communicative Hindi
IV	HN 1441 Core 4 HN 1442 Core 5 HN 1431 (Compl VII) HN 1432 (Compl VIII)	Hindi drama & Oneact Play Premchand's fiction Women's Literature in Hindi Script Writing and Advertisement
V	HN 1541 HN 1542 HN 1543 HN 1544 HN 1545 HN 1551	Ancient Poetry Modern Poetry Hindi Fiction upto 1980 Hindi Grammar – Theory and Practice History of Hindi Language and Linguistics Translation: Theory & Practice (open course)

VI	HN 1641	Postmodern Hindi fiction since 1980
	HN 1642	Literary Criticism
	HN 1643	Translation Theory & Practice
	HN 1644	Film: History and Production
	HN 1645	Dissertation
	HN 1661	(Elective) Journalism in Hindi- Journalism in Kerala

### M.A Hindi

Sem	Paper code	Title of the paper	CA	ESA	Total
I	HL 211	Ancient Poetry Early & Riti Periods	25	75	100
	HL 212	Prose: Novel & Short story	25	75	100
	HL 213	History of Hindi literature			
		Early & Medieval Periods	25	75	100
	HL 214	Literary criticism Indian & Western			
		Literary Thoughts	25	75	100
I	HL 221	Medieval Poetry: Bhakthi Period	25	75	100
	HL 222	Linguistics & Hindi Language	25	75	100
	HL 223	History of Hindi literature modern Period	25	75	100
	HL 224	Functional Hindi	25	75	100
Ш	HL 231	Modern Poetry up to Prayogvad	25	75	100
	HL 232	Prose : Essay and other Prose forms	25	75	100
	HL 233	Special Author: Premchand	25	75	100
	HL 234	Indian Literature	25	75	100
IV	HL 241	Modern Poetry : Since Prayogvad	25	75	100
	HL 242	Drama & One act Plays	25	75	100
	HL 243	Translation and Structural grammar	25	75	100
	HL 244	Hindi Literature of South Indian writers			
		(with special reference to Kerala)	25	75	100
	HL 245	Dissertation & Viva	80	20	

# B.A Economics (Subject code 150)

Sem	Course Code	Course Title
I	EC 1141 Core I PS 1131(Compl) HY 1131.1 (Compl)	Methodology and Perspectives of Social Sciences Principles of Political Science History of Modern India (1857-1900)

I	EC 1241 Core II	Methodology of Economics
	PS 1231(Compl)	Introduction to Political theory
	HY 1231.1 (Compl)	History of Modern India (1901-1920)
ш	EC 1321 Core	Foundation Course II Informatics.
	EC 1341 Core III	Micro Economics II
	PS 1331 (Compl)	Public Administration
$\Box$	HY 1331.1 (Compl)	History of Modern India (1921-47)
IV	EC 1441 Core IV	Basic Tools for Economics I
	EC 1442 Core V	Macro Economics I
	PS 1431 (Compl)	International Politics
	HY 1431.1 (Compl)	History of Contemporary India (after 1948)
٧	EC 1541 Core VI	Money and Modern Banking
	EC 1542 Core VII	Macro Economics II
	EC 1543 Core VIII	Economics of Growth and Development
	EC 1544 Core IX	Indian Economy
	EC 1545 Core X	Public Economics
VI	EC 1641	Kerala Economy
	EC 1642	Financial Economics
	EC 1643	Basic Tools for Economics II
	EC 1644	International Economics
	EC 1655.2	Industrial Economics
	EC 1645	Project/Dissertation

# M.A. Economics

Sem	Paper Code	Name of paper	CA	ESA	Total
I	EC 211	Micro economics I	25	75	100
	EC 212	Economics of growth			
		and development	25	75	100
	EC 213	Indian Economic Policy	25	75	100
	EC 214	Quantitative Methods	25	75	100
I	EC 221	Micro Economics II	25	75	100
	EC 222	Economics of Social Sector			
		and Environment	25	75	100
	EC 223	Indian Economic Policy II			
		(Kerala's Economy)	25	75	100
	EC 224	Research Methodology			
		and Econometrics	25	75	100

Ш	EC 231	Macro Economics I	25	75	100
	EC 232	International Economics I	25	75	100
	EC 233	Public Economics	25	75	100
	EC 234	Agricultural Economics	25	75	100
IV	EC 241	Macro Economics II	25	75	100
	EC 242	International Economics II	25	75	100
	EC 243	Finance & Capital market	25	75	100
	EC 244	Industrial economics	25	75	100
		Dissertation			100
		Viva			100
			Total		1800

## B.A History (Subject Code 140)

Sem	Course Code	Course Title
I	HY 1141	Methodology and perspectives of social sciences
	PS 1131 compl	Principles of Political Science
	EC 1131 compl	Foundations of Economic Theory
П	HY1241	Cultural formation of the pre modern world
	PS 1231 compl	Introduction to Political Theory
	EC 1231 compl	Money and banking
Ш	HY 1321	Foundation course ii - informatics
	HY 1341	Evolution of the Early Indian Society and Culture
	PS 1331 comp	Public Administration
	IEC 1331 compl	Public Finance & Trade
IV	HY 1441	Public Administration
	HY 1442	Medieval India : socio-cultural processes
	PS 1431 compl	History of modern world – part 1
	EC 1431 compl	International PoliticsIndian Planning and
		Economic Development
V	HY1541	Major trends in Indian historical thoughts and writings
	HY1542	Colonialism and resistance movements in India
	HY1543	History of modern world – part 2
	HY1544	History of pre-modern Kerala
	HY1545	Making of Indian nationMechanics of project
		writing Study tour An Introduction To Archeology
	HY 1551.2	Open Course

VI	HY1641	Making of modern Kerala
	HY1642	Major trends in Indian historical thought and writings
	HY1643	Contemporary India
	HY1644	Twentieth century revolutions
	HY1661	Introduction to archaeology
	HY1645	Project/dissertation

## B.A Sociology (Subject code 156)

Sem	Course Code	Course Title
I	SG.1144	Introduction to Social Sciences
	EC 1131 compl	Formation of Economic Theory
	PS 1131 compl	Principles of Political Science
I	SG.1244	Understanding Indian Society
	EC 1231 compl	Money and Banking
	PS 1231 compl	Introduction to Political Theory
Ш	SG.1344	Sociological Theory
	SG.1323	Informatics
	EC 1331 compl	Public Finance and Trade
	PS 1331 compl	Public Administration
IV	SG.1443	Research Methodology
	SG.1444	Social Psychology
	EC 1431 compl	Indian Planning and Economic Development
	PS 1431 compl	International Politics
٧	SG 1541	Research Methodology II
	SG 1542	NGO Management
	SG 1543	Sociology Of Development
	SG 1544	Modern Sociological Theories
	SG 1545	Rural Development
	SG 1551.1	Life Skill Education (open course)
VI	SG 1641	Environment and Society
	SG 1642	Social Stratification
	SG 1643	Public Health and Epidemiology
	SG 1644	Tribal Society in India
	SG 1651	Social Psychology (open/ elective)
	SG 1645	Project Dissertation

## B.Sc. Psychology (Subject Code 257)

Sem	Course Code	Course Title
I	PG 1141	Foundations and methods of psychology
	ZO 1131 compl	Brain and Behaviour
	ST 1131.5 compl	Statistical methods for Psychology I
П	PG 1241	Psychological processes
	ZO 1231 compl	Biological basis of sensory processes
	ST1231.5 compl	Statistical methods for psychology II
Ш	PG 1321	Informatics
	PG 1341	Psychology and assessment of individual differences
	ZO 1331 compl	Physiology of motivation
	ST 1331.5 compl	Statistical methods for psychology iii
IV	PG 1441	Social Behaviour
	PG 1442	Experimental psychology – I
	ZO 1431 compl	Physiology of emotion and cognition
	ST 1431.5 compl	Statistical methods for psychology
V	PG 1541	Social psychological processes
	PG 1542	Individual in Organisation
	PG 1543	Introduction to Maladaptive Behaviour
	PG 1544	Psychological Assessment I
	PG 1545	Experimental psychology- II
	PG1551	Open course
VI	PG 1641	Psychological assessment I I
	PG 1642	Human Development
	PG 1643	Organizational Behaviour
	PG 1644	Maladaptive Behaviour and Intervention
	PG 1651	Elective Course
	PG 1646	Project

## B.Sc. Mathematics (Subject Code 220)

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Sem	Course Code	Course Title	
I	MM 1141	Methods of Mathematics I	
	ST 1131 compl	Descriptive Statistics and Introduction to Probability	
	PY1131.1 compl	Mechanics & properties of matter	
п	MM 1221	Foundations of Mathematics	
	ST 1231.1 compl	Random Variables and Analysis of Bivariate Data	
	PY1231.1 compl	Heat and Thermodynamics	

I	MM 1341	Algebra and Calculus-I				
	ST 1331.1 compl	Probability Distribution and Theory of Estimation				
	PY1331.1 compl	Optics, magnetism & electricity				
IV	MM 1441	Algebra and Calculus-II				
	ST 1431.1 compl	Testing of Hypothesis and analysis of variance				
	ST 1432.1 compl	Statistics Practical				
	PY1431	Modern Physics & Electronics				
V	MM 1541	Real Analysis-I				
	MM 1542	Complex Analysis I				
	MM 1543	Differential Equations				
	MM 1544	Vector Analysis				
	MM 1545	Abstract Algebra I				
	MM 1551	Open Course (Business Mathematics)				
VI	MM 1641	Real Analysis-II				
	MM 1642	Linear Algebra				
	MM 1643	Complex Analysis II				
	MM 1644	Abstract Algebra II				
	MM 1645	Computer Programming (Pract.)				
	MM 1651.1	Elective Course (graph theory)				
	MM 1646	Project				

# M.Sc. Mathematics

Sem	Paper Code	Name of paper	CA	ESA	Total
Ι	MM211	Linear Algebra	25	75	100
	MM212	Real Analysis - I	25	75	100
	MM213	Differential Equations	25	75	100
	MM214	Topology – I	25	75	100
I	MM221	Algebra	25	75	100
	MM222	Real Analysis – II	25	75	100
	MM223	Topology – II	25	75	100
	MM224	Computer Programming in C++	25	75	100
ш	MM231	Complex Analysis – I	25	75	100
	MM232	Functional Analysis – I	25	75	100
	MM233	Elective (One among the following)			
		Automata Theory, Probability ,			
		Operations Research	25	75	100

	MM234	Elective (One among the following)			
		Geometry of numbers,			
		Differential Geometry , Graph Theory,			
		Approximation Theory	25	75	100
IV	MM241	Complex Analysis – II	25	75	100
	MM242	Functional Analysis – II	25	75	100
	MM243	Elective (One among the following)			
		Mathematical Statistics, Mechanics			
		Theory of Wavelets, Coding			
		Theory Field Theory	25	75	100
	MM244	Elective (One among the following)			
		Commutative Algebra , Representation			
		Theory of Finite Groups, Category			
		Theory, Advanced Graph Theory ,			
		(Analytic Number Theory)	25	75	100
		Dissertation/Project	20	80	100

## B.Sc. Physics (Subject code 230)

Sem	Course Code	Course Title
I	PY1141 MM 1131.1 compl.	Basic mechanics & Properties of matter Differentiation and Analytic Geometry
	CH 1131.1 compl.	Principles of chemistry
П	PY1221 MM 1231.1 compl. CH 1231.1 compl.	Classical Mechanics (Foundation) Integration and Vectors Principles of Chemistry
Ш	PY1341 MM 1331.1 compl. CH 1331. compl.	Thermodynamics & Statistical Physics Theory of Eqs., Differential Eqs., and Theory of Matrices Physical and Inorganic Chemistry I
IV	PY1441 MM 1431.1 compl. CH 1431.2 compl. PY 1442	Electrodynamics Complex Analysis, Fourier Series and Transforms Physical and Inorganic Chemistry II Practicals
	PY1541 PY1542	Methodology in Physics & Relativistic Mechanics Quantum Mechanics

v	PY1543 PY1544	Electronics Atomic &Molecular Physics
	PY1551	Open course- Energy Physics
	PY1641	Solid State Physics
	PY1642	Nuclear & Particle Physics
	PY1643	Classical & Modern Optics
	PY1644	Digital Electronics & Computer Science
VI	PY1661	Elective Course PY1661.3 Photonics
	PY 1645	Practicals-Optics,Electricity and Magnetism
	PY 1646	Practicals-Electronics& Computer science
	PY 1647	Project

# M.Sc. Physics

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	Paper Code	Name of paper	CA	ESA	Total
I	PH 211	Classical Mechanics	25	75	100
	PH 212	Mathematical Physics	25	75	100
	PH 213	Basic Electronics	25	75	100
II	PH 221	Modern Optics & Electromagnetic theory	25	75	100
	PH 222	Thermodynamics, Statistical Physics &			
		Basic Quantum Mechanics	25	75	100
	PH 223	Computer Science &Numerical Techniques	25	75	100
	PH 251	General Physics Practicals	25	75	100
	PH 252	Electronics & Computer Science Practicals	25	75	100
III	PH 231	Advanced Quantum Mechanics	25	75	100
	PH 232	Advanced Spectroscopy	25	75	100
	PH 233 X	Special Paper I	25	75	100
IV	PH 241	Condensed Matter Physics	25	75	100
	PH 242	Nuclear & Particle Physics	25	75	100
	PH 243 X	Special Paper II	25	75	100
	PH 261	Advanced Physics Practicals	25	75	100
	PH 262	Advanced Electronics Practicals	25	75	100
	PH 201	Project			100
	PH 202	Viva Voce			100

### B.Sc. Chemistry (Subject Code 235)

D.3C	b.sc. Chemistry (Subject Code 255)					
Sem	Course Code	Course Title				
I	CH 1141	Inorganic Chemistry				
	MM 1131.2 compl	Differentiation and Matrices				
	PY1131.2 compl	Rotational Dynamics & Properties of Matter				
II	CH 1221	Methodology and Informatics				
	MM 1231.2 compl	Integration, Differential Eqs. and Analytic Geometry				
	PY1231.2 compl	Thermal Physics				
Ш	CH 1441	Inorganic Chemistry II				
	MM 1331.2 compl	Theory of Eqs. and Vector Analysis				
	PY 1331.2 compl	Optics, Magnetism & Electricity				
IV	CH 1441	Organic Chemistry I				
	MM 1431.2 compl	Abstract Algebra and Linear Transformations				
	PY 1431.2 compl	Atomic physics, Quantum mechanics & Electronics				
٧	CH 1541	Physical Chemistry I				
	CH 1542	Inorganic Chemistry III				
	CH 1543	Physical chemistry II				
	CH 1551.3	Open Course –Environmental Chemistry				
	CH 1544	Lab II (Inorganic Volumetric Analysis)				
	CH 1545	Lab III (Physical chemistry)				
VI	CH 1641	Organic Chemistry II				
	CH 1642	Organic Chemistry III				
	CH 1643	Physical Chemistry III				
	CH 1644	Lab IV (Organic Chemistry Expts)				
	CH 1645	Lab V (Gravimetry)				
	CH 1661.1	Supramolecular, nanoparticles and				
		Green Chemistry (Elective)				
	CH 1646	Project				

## M.Sc. Chemistry

Sem	Paper Code	Name of paper	CA	ESA	Total
I	CH 211	Inorganic Chemistry I	25	75	100
	CH 212	Organic Chemistry I	25	75	100
	CH 213	Physical Chemistry I	25	75	100
	CH 214	Inorganic Practicals I			
	CH 215	Organic Practicals I			
	CH 216	Physical Practicals I			

I	CH 221	Inorganic Chemistry II	25	75	100
	CH 222	Organic Chemistry II	25	75	100
	CH 223	Physical Chemistry II	25	75	100
	CH 214	Inorganic Practicals I	25	75	100
	CH 215	Organic Practicals I	25	75	100
	CH 216	Physical Practicals I	25	75	100
Ш	CH 231	Inorganic Chemistry III	25	75	100
	CH 232	Organic Chemistry III	25	75	100
	CH 233	Physical Chemistry III	25	75	100
	CH 234	Inorganic Practicals II			
	CH 235	Organic Practicals II			
	CH 236	Physical Practicals II			
IV					
	CH 241	Chemistry of advanced materials.	25	75	100
	CH 242(a)	Inorganic chemistry IV	25	75	100
	CH 242 (b)	Organic Chemistry IV			
	CH 242(c)	Physical chemistry IV			
	(Students ca	n select any one among CH 242)			
	CH 234	Inorganic Practicals II	25	75	100
	CH 235	Organic Practicals II	25	75	100
	CH 236	Physical practicals II	25	75	100
	CH 243(a)	Dessertation		70	70
	CH 243(b)	Visit to R & D centre		5	5
	Comprehe	ensive viva-voce		25	25

# B.Sc. Botany (Subject Code 245)

Sem	Course Code	Course Title
I	BO1141 Core	Angiosperm Anatomy, Reproductive Botany and Palynology
		Lichenology and Plant Pathology
	CH1131.3 Compl	Theoretical Chemistry
	ZO1331 Compl	Animal Diversity I
1 1		

	B01221	Foundation Course Methodology and Perspectives in Plant Science
п	CH1231.3 Comple	Inorganic and Biinorganic Chemistry
	ZO1231 Compl	Animal Diversity II
	BO1341 Core	Microbiology, Phycology, Mycology, Lichenology and
		Plant Pathology
III	CH1331.3 Compl	Physical and Inorganic Chemistry
	ZO1331 Compl	Functional Zoology
IV	BO 1441 Core	Bryology, Pteridology, Gymnosperms and Paleobotany
	CH 1431.3 Compl	Organic Chemistry
	ZO1431 Compl	Applied Zoology
V	BO1541 Core	Angiosperm Morphology, Systematic Botany, Economic
v	B01341 C016	Botany, Ethnobotany and Pharmacognosy
	BO1542 Core	Environmental Studies and Phytogeography
	BO1542 Core	Cell Biology, Genetics and Evolutionary Biology
	BO1544 Core	Core (Practical – 2) VIII (B01341 and B01441)
	BO1544 Core	Core (Practical – 2) VIII (B01341 and B01441)
	B01543 Cole B01551.3	Open Course –I- Forestry
	BU1331.3	Open Course -1- Forestry
	BO1641	Plant Physiology and Biochemistry
	BO1642	Molecular Biology, General Informatics and
		Bioinformatics
VI	BO1643	Plant breeding, Horticulture and Research
		Methodology
	BO1644	Core (Pracical -3) XII (BO 1541 and BO1542)
	BO1645	Core (Pracical-4) XIII IV (B01543, B01641, B01642,
	BO1651	Open Course II- Biotechnology and
		Nanobiotrchnology
	BO1646	Project, Tour Report, Viva-voce

## M.Sc. Botany

Sem	Paper Code	Name of paper	CA	ESA	Total
I	BO 211	Phycology, Mycology, Plant pathology	25	75	100
[	BO 212	Bryophyta, Pteridophyta, Gymnosperms,	25	75	100
	BO213	Microbiology Histology Microtechnique and			
		histochemistry	25	25	75
	BO 214	Practical I	75	100	100
I	BO221	Taxonomy Economic botany, Ethnobotany,			
		Evolution	25	75	100
	BO 222	Environmental Biology Phytogeography			
		Conservation Biology	25	75	100
	BO223	Cell and Molecular Biology Genetics	25	75	100
	BO 224	Practical II	25	75	100
Ш	BO231	Plant breeding Horticulture Reproductive			
		Biology	25	75	100
	BO232	Biophysics Biochemistry Plant Physiology	25	75	100
	BO233	Research Methodology Biostatistics Plant			
		Biotechnology	25	75	100
	BO 234	Practical III	25	75	100
IV	BO241	Special Paper-I Bioinformatics	25	75	100
	BO242a	Special Paper – II – Elective	251	75	100
	BO 243	Practical IV	25	25	100
	BO 201	Dissertation			100
	BO 202	Submission	25	75	100
	BO 203	Comprehensive Viva			100

# B.Sc. Zoology (Subject Code 250)

		-
Sem	Course Code	Course Title
I	ZO 1141 CH 1131.3 compl BO 1131 compl	Animal Diversity I Theoretical Chemistry Microbiology, Mycology, Lichenology, Bryology, Pterydology, Gymnosperm and Plant Pathology
п	ZO 1241 CH 1231.4 compl BO 1231 compl	Animal Diversity II Inorganic and Bio-inorganic Chemistry Biophysics, Biochemistry, Plant Physiology & Environmental Biology

	70.1011	
ш	ZO 1341	Methodology and Perspective of Zoology
	CH 1331.4 compl	Organic and Biophysical Chemistry
	BO 1331 compl	Microtechnique, Angiosperm Anatomy,
		Reproductive Botany and Biotechnology
IV	ZO 1441	General Informatics and Bioinformatics
	CH 1431.4 compl	Organic and Biophysical Chemistry II
	BO 1431 compl	Practical CH 1131.3, 1231.3, 1331.4 & 1431.4
		Systematic Botany, Economic Botany, Ethnobotany,
		Pharmacognosy and Plant BreedingPracticals
		BO 1331, 1231, 1331&1431
V	Z01541	Cell Biology & Molecular Biology
	Z01542	Genetics & Biotechnology
	Z01543	Immunology & Microbiology
	ZO 1551.2	Human Health & Sex Education
	ZO 1641	Practical II
VI	ZO 1642	Physiology and Biochemistry
	ZO 1643	Developmental Biology and Experimental Embryology
	ZO 1644	Ecology, Ethology, Evolution and Zoogeography
	ZO 1645	Practical III
	ZO 1646	Practical IV
	ZO 1647	Project and Field Study

M.Sc. Zoology

Sem	Paper Code	Name of paper	CA	ESA	Total
I	ZO 211	Systematics & Evolutionary Biology	25	75	100
	ZO 212	Biochemistry	25	75	100
	ZO 213	Biophysics, Instrumentation &			
		Computer Science	25	75	100
	ZO 214	Practical	25	75	100
п	ZO 221	Advanced Physiology & Functional Anatomy	25	75	100
	ZO 222	Genetics, Quantitative Analysis &			
		Research methods	25	75	100
	ZO 223	Cell & Molecular Biology	25	75	100
	ZO 224	Practical	25	75	100
Ш	ZO 231	Microbiology and Biotechnology	25	75	100
	ZO 232	Ecology, Ethology, Biodiversity and			
		Conservation	25	75	100

	ZO 233	Immunology & Advanced Developmental			
		Biology	25	75	100
	ZO 234	Practical	25	75	100
IV	ZO 241	Pollution Biology & Environmental physiology	25	75	100
	ZO 242	Environmental Management	25	75	100
	ZO 243	Practical (special paper 1)	25	75	100
	ZO 244	Practical (special paper 2)	25	75	100
	ZO 201	Project	25	75	100
	ZO 202	Comprehensive viva voce		100	100
			Total		1800

# B.Com (Subject Code 159)

Sem I	Course Code CO1121 CO1141 CO1142 CO1131	Course Title Environmental Studies Methodology and Perspectives of Business Education Functional Application of Management Managerial Economics
II	CO1221 CO1241 CO1242 CO1231	Information and Cyber Laws Business Communication and Office Management Financial Accounting Business Regulatory Framework
II	CO1341 CO1342 CO1343 CO1331 CO1361	Entrepreneurship Development Company Administration Advanced Financial Accounting Information Technology in Business Elective – Financial Management
IV	CO1441 CO1442 CO1443 CO1431 CO1461	Capital Market Banking Theory and Practice Corporate Accounting Business Statistics Elective – Project Finance

٧	CO1541	Fundamentals of Income Tax
	CO1542	Cost Accounting
	CO1543	Accounting for Specialized Institutions
	CO1551	Open Course
	CO1561	Financial Markets and Services
VI	CO1641	Auditing
	CO1642	Applied Costing
	CO1643	Management Accounting
	CO1651	Open Course/ Elective Course
	CO1661	Income Tax Law and Accounts
	CO1644	Project

# M.Com.

Sem	Paper Code	Name of paper	CA	ESA	Total
I	CO2 11	Contemporary Management Concepts			
		and Thoughts	25	75	100
	CO2 12	Management Information System	25	75	100
	CO2 13	Research Methodology	25	75	100
	CO2 14	Planning Development and Administration	25	75	100
	CO2 15	Advanced Corporate Accounting	25	75	100
II	CO2 21	E- Business and Cyber Laws	25	75	100
	CO2 22	Business Ethics and Corporate Governance	25	75	100
	CO2 23	Quantitative Techniques	25	75	100
	CO2 24	International Business	25	75	100
	CO2 25	Strategic Management	25	75	100
III	CO2 21	Income Tax Planning and Management	25	75	100
	CO2 22	Security Analysis and Portfolio			
		Management	25	75	100
	CO2 23	Strategic Financial Management	25	75	100
	CO2 24	Advanced Cost and Management			
		Accounting	25	75	100
IV	CO2 21	Indirect Tax Laws and Practices	25	75	100
	CO2 22	International Finance	25	75	100
	CO2 23	Management Optimization Techniques	25	75	100
	CO2 24	Financial Statements – Interpretation			
		and Reporting	25	75	100
		_	Total		1800

### FOR ALL PG STUDENTS

Break -up for each Paper

End Semester Assessment (ESA) : 75 Marks
Cumulative assessment (CA) : 25 marks
Total : 100 Marks

CA Break-up: Attendance -5 Marks, Test Paper (Best of two) -10 Marks,

Assignment -5 marks, Seminar -5 Marks. Total 25 marks

### NAME OF OPEN COURSES OFFERED

SI.No	Department	Course Code	Title of Course	Credit
1	English	EN 1551.1	Communicative	
	Ū		Applications in English	2
2	Malayalam	ML 1551.4	ചലച്ചിത്ര പഠനം	2
3	Hindi	HN 1551	Translation	2
4	Physics	PY 1551	Energy Physics	2
5	Chemistry	CH 1551.3	Environmental Chemistry	2
6	Botany	BO 1551.3	Forestry	2
7	Zoology	ZO 1551.2	Health & Sex Education	2
8	Mathematics	MM 1551	Business Mathematics	2
9	Economics	EC 1551	Human Resource Management	2
10	Psychology	PG 1551.3	Psychological Analysis	
			of Film and culture	2
11	Sociology	SG 1551.1	Life Skill Education	2
12	History	HY 1551.2	Introduction to Archeology	2
13	Commerce	CO 1551.1	Fundamentals of	
			Financial Accounting	2
14	Physical			
	Education	PE 1552	Health and Fitness Education	2
15	Russian	RU 1551.1	Basic Course in Russian	2