Rajagiri College of Social Sciences (Autonomous)

School of Computer science

MASTER OF COMPUTER APPLICATIONS

COURSE PLAN
S1 (2018-21Batch)

RAJAGIRI COLLEGE OF SOCIAL SCIENCES (AUTONOMOUS)

Vision

To become a centre par excellence of learning, unique in experience, value based in approach, and pioneering in efforts for enriching and fulfilling LIFE.

Mission

To facilitate comprehensive and integrated development of individuals, to effectively function as social beings, imbued with righteousness and courage of conviction

DEPARTMENT OF COMPUTER SCIENCE

About Us

Established in 2001, the Department of Computer Science endeavors to bring out world class professional with high level of competency geared to face the challenges ahead. The training objectives and curriculum here are bench marked to the best of institutions. The department stands apart by providing the students excellent training in personality development and academics, moulding them into better individuals and strict professionals.

Vision

To become a centre par excellence of learning, fostering technical competency upholding human values.

Mission

To develop competent and innovative IT professionals who are globally recognized, committed to lifelong learning , blended with social commitment through comprehensive programmes.

SEMESTER II

(November 7th 2018- March 31st 2019)

This semester extends over a period of 18 instructional weeks, and is scheduled to get over by the last week of March 2019. During this semester, the students would be made familiar with Object Oriented Paradigms with CPP, Data Structures, Advanced Operating Systems, Software Engineering and Operations Research. An add on course on Communicative English is given in this semester

The teaching methodology for courses would include guided tutorials, projects and laboratory work apart from the regular lecture sessions. The internal evaluation would be based on continuous assessment. Academic dishonesty in any form, plagiarism or cheating in assignments, exercises or tests from the students would be viewed very seriously. The course lecturers would try their best to adhere to the planned schedule, but changes if any due to unavoidable circumstances would be notified in advance.

The college has incorporated, in addition to prescribed curriculum contents, topics that are important in its own right and that any future scientist should know throughout their career. With this in mind, the sessions are scheduled based on six-day week. The career development courses such as effective communication, personality grooming, aptitude tests, discussions, seminars, talks by experts etc. are also incorporated into the semester, which would be announced from time to time. The regular sessions are scheduled between 9.00 am to 5.00 pm. However classes can be organized even out of the normal class hours.

KEY RULES

1. Students have to be seated in their respective class rooms by 8.50 a.m. Students will not be allowed to enter the classroom after the faculty has entered.

2. Students are not allowed to spend time with any other faculty member during normal class hours unless prior permission has been obtained from the faculty engaging the session at that time.

3. A student will not be allowed to write the university examinations for a semester unless he or she gets a minimum of 75% of attendance for each course in that semester.

4. In case of a student not securing condonation from the University, he/she would have to attend the classes of that course of the subsequent batch for a period that equals the percentage of shortage and submit such additional assignments or coursework as may be required by the college.

5. Assignments have to be submitted on time. Late submission may fail to secure the marks partly or fully as the case may be.

6. Student attendance in co-curricular activities is compulsory.

7. Students must be seated in the examination hall at least 10 minutes before the start of the examination. They must display their ID cards and carry hall tickets for university examinations.

8. No student is allowed to enter the rooms of the faculty when they are not present unless permission is sought from the concerned faculty.

9. All verbal interactions of students must be in English.

10. According to Government and University regulations mobile phones are prohibited in college campuses. If found violating this rule, the rules followed by College will be applied from time to time.

11. Any kind of ragging, intimidation or aggressive behavior is forbidden. Any violation of this rule shall constitute a criminal act and shall be dealt with under provisions of Kerala Prohibition of Ragging Act 1998 which may result in criminal prosecution.

12. Use of plastic materials is completely prohibited in the campus.

13. Use of alcohol, tobacco or any intoxicating substance in campus is prohibited.

14. Students are strictly warned not to view, save or download objectionable material of any type from the computer. Use of any electronic or digital devise in the computer Center is prohibited.

15. Dress code

Students should strictly wear ID cards when inside the campus.

Formals on all Mondays

Boys:

Formal Pants and Full Sleeve Shirts

Formal Shoes

Girls:

Well stitched Salwar with neatly pinned duppatta

Beige color half Shoes

Any formal gathering girls should wear uniform saree.

One cotton salwar to be bought for girls as uniform

Semi formals on all other days except Saturdays

Casuals allowed only on Saturdays

Boys shall come to the class, **Clean shaved everyday with Professional haircut** and **Shirt tucked on all the days.**

16. Strict monitoring of absenteeism. Class tutors should bring to the notice of the staff council and the Head, the names of irregular students and the regular absentees will be warned. Consideration for condonation will be only given for unavoidable circumstances like accidents, prolonged hospitalization etc… Those who fall below 68% of their total attendance will repeat the semester.

18. Students are cautioned against regular absenteeism. Such students are brought to the notice of staff council & the department Head for necessary correction.

Examination System

For each theory course, two Continuous Assessment Examinations (CAE) and one End Semester Examination (ESE) are conducted. For each practical course only one CAE and ESE are conducted. Other components like Seminar, Project, Communication and Viva etc. are conducted as per the course guidelines.

The End Semester Examination (ESE) shall be conducted for theory / practical papers (courses) as per the requirement of the programme. Evaluation of project / dissertation and viva voce examination also shall be conducted if the same are included in the syllabi. The guidelines set by the Academic Council shall be followed for the conduct and evaluation of such examinations.

Continuous Internal Assessment (CIA) of a course:
Continuous Internal Assessment is based on the performance of the student throughout the semester.

Components of CIA-Theory Sl No	**Component**		**Marks**
1	Continuous Assessment Examination (CAE)	CAE 1	7.5 Marks
2	CAE 2		7.5 Marks
3	Assignment/Project/Term paper (Individual)/Class Participation/Presentation/Quizzes/Seminars/Case Studies/ Group Project work/VIVA voce etc… (Any two is compulsory based on GA mentioned in course plan)		7.5 Marks
4	Attendance		2.5 Marks
Total			25 Marks

Components of CIA-Practical's
The practical paper is evaluated with 25 marks as internals and 75 marks for the end semester examinations. The internal evaluation is based on the participant's lab performance which includes lab record, timely completion of programs, class tests and continuous assessment examination. The external evaluation is based on program coding, output, fair record and viva voce of the participant.

Internal Marks

- Lab Performance

  Rough Record, Lab Assignments, Projects/Surprise Tests : **7.5 marks**
- Continuous Assessment Examination **15 marks**
- Attendance : 2.5 marks

Total: 25 Marks

Continuous Assessment Examination-Practical's (Duration: 2hrs)

- Parameters For Continuous Assessment Examination (Max marks: 50)

Algorithm/Program/Flowchart/Pseudo code	**10 Mark**
Coding/Debugging/Implementation	**20 mark**
Formatted Output	**10 mark**
Viva Voce	**10 mark**

Total: 50 Marks

External Marks

End Semester Examination-Practical's (Duration: 3 Hrs) (Max marks: 75)

Fair record	: **10 marks**
Viva-voce	: **10 marks**

Evaluation Criteria For Program1 : **20 marks**

Algorithm	: 8 marks
Writing Program	: 8 marks
Formatted Output	: 4 marks

Evaluation Criteria For Program 2	: **35 mark**s
Algorithm	: 15 marks
Writing Program	: 15 marks
Formatted Output	: 5 marks

Total :75 marks

End Semester Examination

Semester Examination: this will be a formal exam at the end of the semester. ESE will be of 3 hours duration and conducted out of **75 marks**.

Program Outcomes (PO)

Master of Computer Applications Students will be able to:

1. Computational Knowledge:
Apply knowledge of computing fundamentals, computing specialisation, mathematics, and domain knowledge appropriate for the computing specialisation to the abstraction and conceptualisation of computing models from defined problems and requirements.

2. Problem Analysis:
Identify, formulate, research literature, and solve *complex* computing problems reaching
substantiated conclusions using fundamental principles of mathematics, computing sciences, and relevant domain disciplines.

3. Design /Development of Solutions:
Design and evaluate solutions for *complex* computing problems, and design and evaluate systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

4. Conduct Investigations of Complex Computing Problems:
Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5. Modern Tool Usage:
Create, select, adapt and apply appropriate techniques, resources, and modern computing tools to *complex* computing activities, with an understanding of the limitations.

6. Professionl Ethics:

Understand and commit to professional ethics and cyber regulations, responsibilities, and norms of professional computing practice.

7. Life-long Learning:

Recognise the need, and have the ability, to engage in independent learning for continual
development as a computing professional.

8. Project management and finance:

Demonstrate knowledge and understanding of the computing and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

9. Communication Efficacy:

Communicate effectively with the computing community, and with society at large, about *complex* computing activities by being able to comprehend and write effective reports, design documentation, make effective presentations, and give and understand clear instructions.

10. Societal and Environmental Concern:

Understand and assess societal, environmental, health, safety, legal, and cultural issues within local and global contexts, and the consequential responsibilities relevant to professional computing practice.

11. Individual and Team Work:

Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary environments.

12. Innovation and Entrepreneurship

Identify a timely opportunity and using innovation to pursue that opportunity to create value and wealth for the betterment of the individual and society at large.

Program Specific Outcomes (PSO)

MCA Students will be able to:

PSO1: Data Analytics: Acquire knowledge of Data preprocessing and Data quality, Modeling and design of data warehouses, Algorithms for data mining, skills to design, analyze and develop algorithms and implement using high-level programming languages and to define and critically analyze mining approaches for various domains.

PSO2: High-Level Programming: Acquire skills to design, analyze and develop algorithms and implement those using high-level programming languages, to maintain web server services required to host a website, Install, configure, design and develop mobile application development tools.

PSO3: Software Conceptualization and Implementation: Acquire knowledge to design a solution to a given problem using one or more design patterns and implement the design in a programming language by lifecycle paradigms, apply software testing and quality assurance techniques; to work collaboratively team environment to develop software from conceptualization to completion, including requirements elicitation, system modeling, system design, implementation, unit and system testing, integration, source code management configuration management, and release management

PSO4: Practices and tools in Information Security: Acquire a practical overview of the issues involved in the field of information security and assurance; acknowledge the ethical considerations in all dimensions of information security, and utilize the software tools to explore, rectify or prevent the unauthenticated actions in the domain.

Program Educational Objectives (PEO)

Graduates of MCA program shall

PEO 1: Graduates of the program will be computer professionals of probity, positive attitude and scientific temper

PEO 2: Graduates of the program will have sound theoretical knowledge and skill for software development and implementation

PEO 3: Graduates of the program will possess good communication, technical and innovative skills

PEO 4: Graduates of the program will have a sense of social awareness

COURSE MAPPING

MCA 201	Operations Research	Dr.Bindiya M Varghese
MCA202	Advanced Operating Systems	Dr.Bindiya M Varghese
MCA203	Object Oriented Programming with CPP	Ms.Ann Baby
MCA204	Software Engineering	Dr.Lakshman Mahadevan
MCA205	Data Structures	Ms Prema S Thomas
MCA206	CPP Lab	Ms.Ann Baby
MCA207	DS Lab	Ms Prema S Thomas
AOC -2	Communicative English	Mr.Rajesh

Time Table

SEMESTER II : CLASS TUTOR : Ms. Ann Baby								
Day/Time	**9.00-9.55**	**10.00-10.55**	**11.00-11.55**	**12.00-1.00**	**1.00-2.00**	**2.00-2.55**	**3.00-4.00**	**4.05-5.00**
MON	C++-T (Ann)	C++-T (Ann)	SE (LMD)	SE (LMD)	LUNCH BREAK	DS-T (PST)	DS-T (PST)	Remedial
TUE	C++-LAB (Ann)	C++-LAB (Ann)	AOS (BMV)	AOS (BMV)		CSTAR (Ann)	CSTAR (Ann)	CSTAR (Ann)
WED	DS-T (PST)	DS-T (PST)	DS-LAB (PST)	DS-LAB (PST)		C++-T (Ann)	C++-T (Ann)	Remedial
THU	AOS (BMV)	AOS (BMV)	C++-LAB (Ann)	C++-LAB (Ann)		DS-LAB (PST)	DS-LAB (PST)	DS-LAB (PST)
FRI	OR (BMV)	OR (BMV)	OR (BMV)	OR (BMV)		SE (LMD)	SE (LMD)	Remedial
SAT	OR (BMV)	OR (BMV)	ComEng AOC2			Remedial	Remedial	Remedial

Academic calendar (2018-21) semester 1 MCA

		(2018-2021)
01-11-2018	Thursday	
02-11-2018	Friday	
03-11-2018	Saturday	
04-11-2018	Sunday	
05-11-2018	Monday	
06-11-2018	Tuesday	Deepavali
07-11-2018	Wednesday	Sem 2 Starts
08-11-2018	Thursday	d2
09-11-2018	Friday	d3
10-11-2018	Saturday	
11-11-2018	Sunday	
12-11-2018	Monday	d4
13-11-2018	Tuesday	d5
14-11-2018	Wednesday	d6
15-11-2018	Thursday	d7
16-11-2018	Friday	Spiritual Retreat
17-11-2018	Saturday	d9
18-11-2018	Sunday	
19-11-2018	Monday	d10 – CIA1 : MCA 201
20-11-2018	Tuesday	Nabi Dinam
21-11-2018	Wednesday	d11– CIA1 : MCA 202
22-11-2018	Thursday	d12 - MPOWER
23-11-2018	Friday	d13- MPOWER
24-11-2018	Saturday	d14- MPOWER
25-11-2018	Sunday	
26-11-2018	Monday	d15
27-11-2018	Tuesday	d16
28-11-2018	Wednesday	d17
29-11-2018	Thursday	d18 CIA1 : MCA 203
30-11-2018	Friday	d19 - State Level Seminar
01-12-2018	Saturday	d20
02-12-2018	Sunday	
03-12-2018	Monday	d21 CIA1 : MCA 204
04-12-2018	Tuesday	d22
05-12-2018	Wednesday	d23 CIA1 : MCA 205
06-12-2018	Thursday	d24 Domain Workshop
07-12-2018	Friday	d25 Domain Workshop
08-12-2018	Saturday	
09-12-2018	Sunday	
10-12-2018	Monday	d26
11-12-2018	Tuesday	Industry interaction
12-12-2018	Wednesday	d28 - Mid Sem faculty Evaluation

13-12-2018	Thursday	d29
14-12-2018	Friday	d30 CAE#1
15-12-2018	Saturday	d31 CAE#1
16-12-2018	Sunday	
17-12-2018	Monday	d32 CAE#1
18-12-2018	Tuesday	d33 CAE#1
19-12-2018	Wednesday	d34 CAE#1
20-12-2018	Thursday	d35
21-12-2018	Friday	d36
22-12-2018	Saturday	d37
23-12-2018	Sunday	
24-12-2018	Monday	
25-12-2018	Tuesday	Christmas
26-12-2018	Wednesday	CIA2 : MCA 201
27-12-2018	Thursday	
28-12-2018	Friday	
29-12-2018	Saturday	
30-12-2018	Sunday	
31-12-2018	Monday	CIA2 : MCA 202
01-01-2019	Tuesday	
02-01-2019	Wednesday	Mannam jayanthi
03-01-2019	Thursday	d38 CIA2 : MCA 203
04-01-2019	Friday	d39
05-01-2019	Saturday	d40
06-01-2019	Sunday	
07-01-2019	Monday	d41 CIA2 : MCA 204
08-01-2019	Tuesday	d42
09-01-2019	Wednesday	d43
10-01-2019	Thursday	d44
11-01-2019	Friday	d45 CIA2 : MCA 205
12-01-2019	Saturday	
13-01-2019	Sunday	
14-01-2019	Monday	d46
15-01-2019	Tuesday	d47
16-01-2019	Wednesday	d48
17-01-2019	Thursday	d49
18-01-2019	Friday	d50
19-01-2019	Saturday	d51
20-01-2019	Sunday	
21-01-2019	Monday	d52 CIA3 : MCA 201
22-01-2019	Tuesday	d53
23-01-2019	Wednesday	d54
24-01-2019	Thursday	d55
25-01-2019	Friday	d56 CIA3 : MCA 202
26-01-2019	Saturday	Republic Day

27-01-2019	Sunday	
28-01-2019	Monday	d57 CIA3 : MCA 203
29-01-2019	Tuesday	d58
30-01-2019	Wednesday	d59
31-01-2019	Thursday	d60
01-02-2019	Friday	d61 CIA3 : MCA 204
02-02-2019	Saturday	Alumni Interaction
03-02-2019	Sunday	
04-02-2019	Monday	d63 CIA3 : MCA 205
05-02-2019	Tuesday	d64
06-02-2019	Wednesday	d65
07-02-2019	Thursday	d66
08-02-2019	Friday	d67
09-02-2019	Saturday	d68
10-02-2019	Sunday	
11-02-2019	Monday	CAE#2
12-02-2019	Tuesday	CAE#2
13-02-2019	Wednesday	CAE#2
14-02-2019	Thursday	CAE#2
15-02-2019	Friday	CAE#2
16-02-2019	Saturday	
17-02-2019	Sunday	
18-02-2019	Monday	CAEP
19-02-2019	Tuesday	CAEP
20-02-2019	Wednesday	d77
21-02-2019	Thursday	d78
22-02-2019	Friday	d79
23-02-2019	Saturday	d80
24-02-2019	Sunday	
25-02-2019	Monday	d81
26-02-2019	Tuesday	d82
27-02-2019	Wednesday	d83
28-02-2019	Thursday	d84
01-03-2019	Friday	d85- last working day
02-03-2019	Saturday	
03-03-2019	Sunday	
04-03-2019	Monday	Sivarathri
05-03-2019	Tuesday	
06-03-2019	Wednesday	
07-03-2019	Thursday	
08-03-2019	Friday	
09-03-2019	Saturday	
10-03-2019	Sunday	
11-03-2019	Monday	ESE-201
12-03-2019	Tuesday	

13-03-2019	Wednesday	ESE 202
14-03-2019	Thursday	
15-03-2019	Friday	ESE 203
16-03-2019	Saturday	
17-03-2019	Sunday	
18-03-2019	Monday	ESE 204
19-03-2019	Tuesday	
20-03-2019	Wednesday	ESE 205
21-03-2019	Thursday	
22-03-2019	Friday	ESE-206
23-03-2019	Saturday	ESE-206
24-03-2019	Sunday	
25-03-2019	Monday	
26-03-2019	Tuesday	
27-03-2019	Wednesday	ESE 207
28-03-2019	Thursday	ESE 207
29-03-2019	Friday	
30-03-2019	Saturday	
31-03-2019	Sunday	

COURSE INFORMATION SHEET

PROGRAMME : MCA	
COURSE : **Operations Research**	SEMESTER **: 2**
COURSE CODE : **MCA201** REGULATION : **2015**	COURSE TYPE : **CORE**
COURSE AREA/DOMAIN **:** **Mathematics/Management**	CONTACT HOURS: **4 hours/Week.**

SYLLABUS:

Module	DETAILS	HOURS
I	Linear programming problems - Mathematical formulation, graphical method of solution, simplex method	12
II	Duality in linear programming problems, dual simplex method, sensitivity analysis, transportation and assignment problems, Traveling salesman Problem.	12
III	Game theory Introduction, two-person zero-sum games, some basic terms, the maxmini-minimax principle, games without saddle points-Mixed Strategies, graphic solution of 2 * n and m*2 games, dominance property. CPM & PERT- project scheduling, critical path calculations, Crashing.	12
IV	Queueing theory -basic structure of queuing systems, roles of the Poisson and exponential distributions, classification of queues basic results of M/M/1: FIFO systems, extension to multi-server queues.	12
V	Simulation: simulation concepts, simulation of a queuing system using event list,pseudo random numbers, multiplication congruential algorithm, inverse transformation method, basic ideas of Monte-Carlo simulation.	12
TOTAL HOURS		**60**

TEXT/REFERENCE BOOKS:

T/R	BOOK TITLE/AUTHORS/PUBLICATION
R	Taha.H.A ,operation Research : An Introduction, McMilan publishing Co., 1982. 7th ed.

R	Ravindran A, Philips D.T & Solbery.J.J, Operations Research: Principles and practice, John Wiley & Sons, New York, 1987.
R	Frank S. Budnick, Dennis Mcleavey and Richard Mojena, Principles of Operations Research for Management. All India Traveler Book seller, Delhi.
R	Gillet.B.E., Introduction to Operations Research - A Computer oriented algorithmic approach, McGraw Hill, 1987.
R	Hillier.F.S & Liberman.G.J, operation Research, Second Edition, Holden Day Inc, 1974.

COURSE PRE-REQUISITES:

C.CODE	COURSE NAME	DESCRIPTION	SEM
	Linear algebra	Familiarity with linear algebra is required	

COURSE OBJECTIVES:

1	To introduce the students how to use variables for formulating complex mathematical models in management science, linear programming, game theory, queing theory and simulation.

COURSE OUTCOMES:

SNO	DESCRIPTION
MCA201.1	Formulate a real-world problem as a mathematical programming model.
MCA201.2	Understand the theoretical workings of the simplex method for linear programming and perform iterations of it by hand.
MCA201.3	Solve specialized linear programming problems like the transportation and assignment problems
MCA201.4	Understand the basic concept of game theory and queuing theory.
MCA201.5	Solve network problems using CPM and PERT
MCA201.6	Understand the basic concept of simulation.

CO-PO AND CO-PSO MAPPING

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	P0 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4
MCA201.1	2															
MCA201.2			2													
MCA201.3	2															
MCA201.4		2														
MCA201.5		2						2								
MCA201.6	2															
MCA201 (overall level)																

SUGGESTED MOOCs:

1	https://onlinecourses.nptel.ac.in/noc17_mg10/preview

DELIVERY/INSTRUCTIONAL METHODOLOGIES:

☑CHALK & TALK	☑STUD. ASSIGNMENT	WEB RESOURCES	
LCD/SMART BOARDS	STUD. SEMINARS	ADD-ON COURSES	

ASSESSMENT METHODOLOGIES-DIRECT

☑ ASSIGNMENTS	STUD. SEMINARS	☑TESTS/MODEL EXAMS	☑ SEM EXAMINATION
STUD. LAB PRACTICES	STUD. VIVA	MINI/MAJOR PROJECTS	CERTIFICATIONS
ADD-ON COURSES	OTHERS		

ASSESSMENT METHODOLOGIES-INDIRECT

ASSESSMENT OF COURSE OUTCOMES (BY FEEDBACK, ONCE)	☑STUDENT FEEDBACK ON FACULTY (TWICE)
ASSESSMENT OF MINI/MAJOR PROJECTS BY EXT. EXPERTS	OTHERS

CIA Evaluation 25 Marks

1. **Written Assignment 2.5 Marks**
2. **Open Test 2.5 Marks**
3. **Viva 2.5 marks**
4. **Attendance 2.5 Marks**
5. **CAE 1 & 2 15 Marks**

Evaluation Criteria	CO
Written Assignment	MCA 201.1, MCA 201.2
Open Test	MCA 201.3,MCA 201.4
Viva	MCA 201.5
CAE1	MCA 201.1,MCA 201.2
CAE2	MCA 201.3,MCA 201.4

Final(Semester) Evaluation (75 Marks):

Semester Exam

Session Outline

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Session	Topics	Date
1	Linear programming problems - Mathematical formulation	
2	Graphical method of solution,	
3	Contt	
4	Simplex method	
5	Contt..	
6	Duality in linear programming problem,.	
7	Dual simplex method	
8	Sensitivity analysis	
9	Transportation problems	
10	Contt..	
11	Assignment problems	
12	Traveling salesman Problem	

13	CPM & PERT- project scheduling	
14	Critical path calculations, Crashing	
15	Game theory Introduction, two-person zero-sum games	
16	maxmini-minimax principle, games without saddle points-	
17	Mixed Strategies, graphic solution of 2 * n and m*2 games,	
18	dominance property	
19	Queueing theory -basic structure of queuing systems, roles of the Poisson and exponential distributions	
20	Contt..	
21	Classification of queues basic results of M/M/1: FIFO systems, extension to multi-server queues.	
22	Contt..	
23	Problems from model1 queues	
24	Simulation: simulation concepts, simulation of a queuing system using event list,	
25	Pseudo random numbers, multiplication congruential algorithm	
26	inverse transformation method, basic ideas of Monte-Carlo simulation.	
27	Contt..	
28	QP discussion	
29	QP discussion	
30	Concluding session	

Operating Systems			
Course Code	MCA202	**Course Title**	Operating Systems
Course Type	Core	**Contact Hours**	4 Hours per Week
Credit	4	**Domain**	Professional Core
Syllabus			
I	**File System** File Systems, File concept, File support, Access methods, Allocation methods, Directory systems, File protection, free space management **Disk Management** -Secondary-Storage Structure, Disk structure, Disk scheduling, Disk management, Swap-space management, Disk reliability.		
II	**Memory Management** Memory Management, Memory partitioning, Swapping, Paging, Segmentation, Virtual memory, Overlays, Demand paging, Performance of Demand paging, Page replacement algorithms, Allocation algorithms		
III	**Process Management and Concurrency management** Process and Thread Management, Concept of process and threads, Process states, Process management, Context switching, Interaction between processes and OS, Multithreading, Concurrency Control, Concurrency and Race Conditions, Mutual exclusion requirements		
IV	**Concurrency Management** Software and hardware solutions for mutual exclusion, Semaphores, Classical IPC problems and solutions Deadlock, Characterization, Avoidance and Prevention, Detection, Recovery		
V	**Protection and case STUDY: LINUX** Protection, Goals of protection, Domain of protection, Access matrix, Implementation of access matrix, Revocation of access rights. Case Study Linux OS –File System, basic commands, Processes, Access permissions, redirection, filters		
TEXT/REFERENCE BOOKS:			
R	Silberschatz, Galvin, and Gagne, “Operating System Concepts”, Eighth Edition, Wiley Publication, 2011.		
R	Andrew S. Tanenbaum, “Modern Operating Systems”, Second Edition, Pearson Education, 2004.		
R	Gary Nutt, “Operating Systems”, Third Edition, Pearson Education, 2004		
R	Harvey M. Deital, “Operating Systems”, Third Edition, Pearson Education, 2004.		
R	Milan Milenkovic, “Operating Systems: Concept and Design”, 2nd Edition, 2001.		
R	“Linux Command Line And Shell Scripting Bible (English) 2nd Edition”, Wiley Publication.		
R	Richard Petersen, “Linux: The Complete Reference”, Sixth Edition, 2007		
COURSE PRE-REQUISITES:			
Nil			
COURSE OBJECTIVES:			
1. To provides a comprehensive introduction to understand the underlying principles, techniques and approaches used in operating systems. 2. To understand how OS manage resources such as memory, peripherals, and schedule CPU time and learn how applications communicate with the user and the underlying hardware.			
COURSE OUTCOMES:			
CO. No	**Course Outcome description**		
MCA202.1	Elaborate the understanding of an operating system by giving emphasis on the file systems and Hard Disk Management.		
MCA202.2	Comprehend the primary memory control and interaction of an operating system.		
MCA202.3	Understand the concept of Process Management and Inter Process communication Component of an Operating System		
MCA202.4	Realize the importance and the implementation of protection mechanism used by an operating system		
MCA202.5	Learn the concepts of operating system through experimental practice using Linux operating system		
CO-PO AND CO-PSO MAPPING			

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	P010	PO11	PO12	PSO1	PSO2	PSO3	PSO4
MCA202.1			3													
MCA202.2	1		3													
MCA202.3	2		3													
MCA202.4			3													
MCA202.5			1		2											
MCA202.6						3										

TOPICS BEYOND SYLLABUS/ADVANCED TOPICS/DESIGN:

SNO	DESCRIPTION	PROPOSED ACTIONS
1	Linux basic Scripting	Lab practical

SUGGESTED MOOCs:

1	https://nptel.ac.in/courses/106108101/
2	https://www.tutorialspoint.com/operating_system/

DELIVERY/INSTRUCTIONAL METHODOLOGIES:

☑CHALK & TALK	☑STUD. ASSIGNMENT	WEB RESOURCES	
☑ LCD/SMART BOARDS	STUD. SEMINARS	ADD-ON COURSES	

ASSESSMENT METHODOLOGIES-DIRECT

☑ ASSIGNMENTS	STUD. SEMINARS	☑TESTS/MODEL EXAMS	☑ SEM EXAMINATION
☑STUD. LAB PRACTICES	☑STUD. VIVA	PROJECTS	CERTIFICATIONS
ADD-ON COURSES	OTHERS		

ASSESSMENT METHODOLOGIES-INDIRECT

ASSESSMENT OF COURSE OUTCOMES (BY FEEDBACK, ONCE)	☑STUDENT FEEDBACK ON FACULTY (TWICE)
ASSESSMENT OF MINI/MAJOR PROJECTS BY EXT. EXPERTS	OTHERS

CIA Evaluation 25 Marks

6. **Written Assignment 2.5 Marks**
7. **Online Test 2.5 Marks**
8. **Viva 2.5 marks**
9. **Attendance 2.5 Marks**
10. **CAE 1 & 2 15 Marks**

Evaluation Criteria	CO
Written Assignment	MCA 203.1
Online Test	MCA 203.4
Viva	MCA 203.5
CAE1	MCA 203.1, MCA 203.2
CAE2	MCA 203.3, MCA 203.4

Final (Semester) Evaluation (75 Marks):

Semester Exam

SESSION OUTLINE

Session	Topics	Date
1	File Systems, File concept, File support, Access methods,	
2	Allocation methods, File protection, free space management	
3	Directory systems	
4	Disk Management -Secondary-Storage Structure, Disk structure	
5	Disk scheduling, Disk management, Swap-space management	
6	Disk reliability	
7	Memory Management, Memory partitioning, Swapping,	
8	Paging,	
9	Segmentation,	
10	Virtual memory, Overlays	
11	Demand paging, Performance of Demand paging,	
12	Page replacement algorithms, Allocation algorithms	
13	Process Management, Concept of process and threads, Process states, Process management, Context switching	
14	Discussion:***Self Study: Threads – multithreading concepts***	
15	Interaction between processes and OS, Concurrency Control, Concurrency and Race Conditions	
16	Mutual exclusion requirements	
17	Software solutions	
18	Hardware solutions	
19	Semaphores, Classical IPC problems and solutions	
20	Deadlock, Characterization,	
21	Avoidance and Prevention	
22	Deadlock Detection, Recovery	

23	Protection, Goals of protection, Domain of protection,	
24	Access matrix, Implementation of access matrix, Revocation of access rights.	
25	Linux Basics Commands: Commands for files and directories cd, cp, mv, rm,mkdir, View files, disk related commands, checking disk free spaces, more, less, creating and viewing files, using cat, file comparisons	
26	Processes in linux – process fundamentals, connecting processes with pipes, Redirecting input output, manual help, Background processing, managing multiple processes,	
27	changing process priority, scheduling of processes at command, batch commands, kill, ps, who, sleep	
28	Group Activity	
29	Group Activity	
30	Revision	

COURSE INFORMATION SHEET – MCA 203			
Course Code	*MCA 203*	***Course Title***	*C++ And Object Oriented Programming Paradigms*
Course Type	*Core*	***Contact Hours***	*4 Hours per Week*
Credit	*4*	***Domain***	*Computing*
Syllabus			
I	Introduction to Object-Oriented Programming: Evolution of programming methodologies. Procedural Approach Vs Object-Oriented Approach. Encapsulation and Abstraction, Message Passing, Inheritance, Reusability, Extensibility, Polymorphism, Overloading. Objects and Classes: Access Specifies. Memory Allocation for Objects, Friend Functions and Friend Classes, Static Data Members, Static Member functions. this pointer. Comparison of class with structure. Inline functions. Arrays of Objects; Objects as Function Arguments; Returning Objects; Constructing Two-Dimensional Arrays. String Manipulation using objects.		
II	Constructors and Destructors: Purpose of Constructors and Destructors. Default Constructors, Constructors with & without parameters, Constructor Overloading, Copy Constructor. Invoking Constructors and Destructors. Pointers in C++ : Pointer declaration and Access, Pointer to data member, pointer to member functions, pointer to object., memory management – new and delete		
III	Polymorphism: Overloading Concepts, Function Overloading: Operator Overloading: Defining Operator Function, Rules for overloading Operators. Overloading unary operators, overloading binary operators, Overloading Comma, [], (), ->, new, delete Operators, Overloading << and >> Operators for Objects. Type Conversions –Basic to Class, Class to Basic and One class to another class type.		
IV	Inheritance: Basic Concepts, Reusability & Extensibility. Defining derived classes, protected access specified in Base class constructors and destructors in derived classes – Types of Inheritances. Protected visibility mode; Member Classes: Nesting of Classes. Virtual Functions: Virtual Base Classes, virtual member function access, late binding, pure virtual function, abstract classes.		
V	Console I/O operations: C++ streams and C++ stream classes – Predefined Objects, unformatted I/O operations, Formatted I/O operations - manipulators -User defined manipulators. Disk I/O Operations: Stream Classes, classes for file stream operations, opening and closing a file, file modes, writing and reading objects, binary versus character files, tellg() and seekg(), seekp() and tellp(). Updating a File:Error Handling During File Operations. Templates: Generic Functions- A generic swap function, Functions with more than one Generic Type, Overloading a Function Template. Generic Classes, Class template with more than one Generic Type Exception Handling: Fundamentals of Exception Handling, Catching Class Types, Using Multiple catch statements, Catching All Exception, Restricting Exception, throw statement		
TEXT/REFERENCE BOOKS:			
R	Object oriented Programming with c++. Balagursamy 4th edition or above		
R	Deitel&Deitel, C++ How to program, Pearson Education Asia, 7th Edition, 2010.		
R	Computer Science: A Structured Programming Approach Using C++, Forouzan, Thomson Learning , 2 Edn		
R	Gaddis Tony, Starting Out with C++, dreamtech Press,		
R	C++ Programming: Malik, Thomson Learning , 3 Edn		
R	K.R VenugopalRajkumar, Mastering C++ , TMH.		
R	Sotter A Nicholas and Kleper J Scott, Professional C++, Wiley Publishing Inc.		
R	Schildt Herbert, The Complete Reference C++, Tata McGraw Hill, 4th Edition		
COURSE PRE-REQUISITES:			
MCA103			
COURSE OBJECTIVES:			
To enable the students to gain an understanding of various OOP concepts using the programming language C++.			

COURSE OUTCOMES:	
CO. No	**Course Outcome description**
MCA203.1	To introduce the object oriented concepts
MCA203.2	To familiarize with constructors, destructors and pointers in CPP
MCA203.3	To perform overloading and type conversions
MCA203.4	To gain knowledge in inheritance
MCA203.5	To familiarize the features such as templates and exception handling

CO-PO AND CO-PSO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	P010	PO11	PO12	PSO1	PSO2	PSO3	PSO4
MCA203.1	3													2		
MCA203.2	3													2		
MCA203.3	3													2		
MCA203.4	3													2		
MCA203.5	3													2		

TOPICS BEYOND SYLLABUS/ADVANCED TOPICS/DESIGN:

SNO	DESCRIPTION	PROPOSED ACTIONS
1	Familiarization of C++ with objective type questions	Online Exams

WEB SOURCE REFERENCES:

1	https://www.tutorialspoint.com/cplusplus/
2	http://www.cplusplus.com/doc/tutorial/

SUGGESTED MOOCs:

1	https://www.coursera.org/
2	https://onlinecourses.nptel.ac.in

DELIVERY/INSTRUCTIONAL METHODOLOGIES:

☑CHALK & TALK	☑STUD. ASSIGNMENT	WEB RESOURCES	
☑ LCD/SMART BOARDS	STUD. SEMINARS	ADD-ON COURSES	

ASSESSMENT METHODOLOGIES-DIRECT

☑ ASSIGNMENTS	STUD. SEMINARS	☑TESTS/MODEL EXAMS	☑ SEM EXAMINATION
STUD. LAB PRACTICES	☑STUD. VIVA	PROJECTS	CERTIFICATIONS
ADD-ON COURSES	OTHERS		

ASSESSMENT METHODOLOGIES-INDIRECT

ASSESSMENT OF COURSE OUTCOMES (BY FEEDBACK, ONCE)	☑STUDENT FEEDBACK ON FACULTY (TWICE)
ASSESSMENT OF MINI/MAJOR PROJECTS BY EXT. EXPERTS	OTHERS

CIA Evaluation 25 Marks

1. **Written Assignment 2.5 Marks**
2. **Online Test 2.5 Marks**
3. **Viva 2.5 marks**
4. **Attendance 2.5 Marks**
5. **CAE 1 & 2 15 Marks**

Evaluation Criteria	CO
Written Assignment	MCA 203.1, MCA 203.2
Online Test	MCA 203.3, MCA 203.4
Viva	MCA 203.5
CAE1	MCA 203.1, MCA 203.2
CAE2	MCA 203.3, MCA 203.4

Final (Semester) Evaluation (75 Marks):

Semester Exam

SESSION OUTLINE

Session	Topics	Date
1	Introduction to Object-Oriented Programming: Evolution of programming methodologies. Procedural Approach Vs Object-Oriented Approach.	
2	Encapsulation and Abstraction, Message Passing, Inheritance, Reusability, Extensibility, Polymorphism, Overloading.	
3	Objects and Classes: Access Specifies. Memory Allocation for Objects, Friend Functions and Friend Classes, Static Data Members,	
4	Static Member functions. this pointer. Comparison of class with structure. Inline functions. Arrays of Objects;	
5	Objects as Function Arguments; Returning Objects; Constructing Two-Dimensional Arrays. String Manipulation using objects.	
6	Constructors and Destructors: Purpose of Constructors and Destructors.	
7	Default Constructors, Constructors with & without parameters,	
8	Constructor Overloading, Copy Constructor. Invoking Constructors and Destructors.	
	Pointers in C++ : Pointer declaration and Access,	
9	Pointer to data member, pointer to member functions, pointer to object	
10	memory management	
11	new and delete	
12	Polymorphism: Overloading Concepts, Function Overloading:	
13	Operator Overloading:	
14	Defining Operator Function, Rules for overloading Operators.	
15	Overloading unary operators, overloading binary operators	

16	, Overloading Comma, [], (), ->, new, delete Operators, Overloading << and >> Operators for Objects.	
17	Type Conversions –Basic to Class, Class to Basic and One class to another class type.	
18	Inheritance: Basic Concepts, Reusability & Extensibility.	
19	Defining derived classes, protected access specified in Base class constructors and destructors in derived classes –	
20	Types of Inheritances. Protected visibility mode; Member Classes: Nesting of Classes.	
21	Virtual Functions: Virtual Base Classes,	
22	virtual member function access, late binding,	
23	pure virtual function	
24	Abstract classes.	
25	Console I/O operations: C++ streams and C++ stream classes – Predefined Objects, unformatted I/O operations,	
26	Formatted I/O operations - manipulators -User defined manipulators. Disk I/O Operations: Stream Classes, classes for file stream operations, opening and closing a file, file modes, writing and reading objects,	
27	Binary versus character files, tellg() and seekg(), seekp() and tellp(). Updating a File:Error Handling During File Operations.	
28	Templates: Generic Functions- A generic swap function, Functions with more than one Generic Type, Overloading a Function Template. Generic Classes, Class template with more than one Generic Type	
29	Exception Handling: Fundamentals of Exception Handling, Catching Class Types, Using Multiple catch statements, Catching All Exception, Restricting Exception, throw statement	
30	Revision	

Course Code	*MCA204*	***Course Title***	*Software Engineering*
Course Type	*Core*	***Contact Hours***	*4 Hours per Week*
Credit	*4*	***Domain***	*Professional Core*
Syllabus			
I	**Software process** Software engineering definition, Software problems, important qualities of a software product, software engineering principles. Process Models – The Waterfall Model, Prototyping, incremental model, Spiral Model, V-Model. Agile development		
II	**Requirement Analysis, Design** Understanding Requirements, Requirements Modeling: Scenarios, Software requirements specification, SRS, Role & Skills of system Analyst, Design Concepts, Software Architecture, User Interface Design		
III	**Coding, Testing and Maintenance** Coding – programming principles and guidelines, Coding Standards, refactoring, verification, complexity metrics. Testing – Levels of testing, testing for conventional and object oriented applications, Maintenance – Need for maintenance, Management of maintenance, challenges of maintenance phase.		
IV	**Quality Management** Quality concepts, Software Metrics- LOC based, Function point Metric, Quality Metrics, Review techniques, software quality assurance, Software configuration management, Change Management		
V	**Software Project Management** Project Management Concepts, Estimation for Software Projects, Project Scheduling, Risk Management		
TEXT/REFERENCE BOOKS:			
R	Software Engineering, a Practitioner's Approach- Roger S Pressman 7th Edition, Tata Mc-Graw Hill Publishing Co. Ltd.		
R	Software Engineering – Ian Somerville 9th Edition, Pearson Education		
R	An Integrated Approach to Software Engineering- Pankaj Jalote 3rd edition, Narosa Publishing House		
R	Fundamentals of Software Engineering- Ghezzi, Jazayer's and Mandriolli 2nd Edition, PHI		
R	Software Engineering principles & Practice- Waman S Jawadekar 2nd Edition, Tata Mc-Graw Hill Publishing Co. Ltd.		
R	Software Project Management: Pankaj Jalote, Pearson Education		
R	Software Project Management –A Unified Framework: Walker Royce, Pearson Education.		
R	Software Project Management –S A Kelkar .Prentice Hall India		
COURSE PRE-REQUISITES:			
Basic Knowledge of Computer Science			
COURSE OBJECTIVES:			

1. Knowledge of basic Software Engineering methods and practices, and their appropriate application
2. A general understanding of software process models.
3. An understanding of software requirements and the SRS document.
4. An understanding of design concepts and different software architectural styles.
5. An understanding of implementation issues such as modularity and coding standards.
6. An understanding of approaches to verification and validation including static analysis, and reviews. and software testing approaches
7. An understanding of software evolution and related issues such as version management.
8. An understanding on quality control and how to ensure good quality software.
9. An understanding on quality control and how to ensure good quality software.

10. An understanding of the role of project management including planning, scheduling, risk management, etc.

COURSE OUTCOMES:

CO. No	Course Outcome description
MCA204.1	To analyse, design and manage the development of a computing-based system, component or process to meet desired needs within realistic constraints in one or more application domains.
MCA204.2	To understand software testing and quality assurance techniques at the module level, and understand these techniques at the system level
MCA204.3	To use knowledge, techniques, skills and modern tools necessary for software engineering practice
MCA204.4	To function on multidisciplinary teams
MCA204.5	To communicate effectively with stakeholders involved in projects
MCA204.6	Adapt to a regular system of teaching learning and assessment, thereby making them professionally ethical.

CO-PO AND CO-PSO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	P010	PO11	PO12	PSO1	PSO2	PSO3	PSO4
MCA204.1	2	3	2					2	3						2	
MCA204.2	2	2			2			2							2	
MCA204.3		2			2			2								
MCA204.4						1			2		3					
MCA204.5						1			3		2					
MCA204.6						3										

TOPICS BEYOND SYLLABUS/ADVANCED TOPICS/DESIGN:

SNO	DESCRIPTION	PROPOSED ACTIONS
1	Latest journal articles in software engineering	TUTORIAL/LAB

WEB SOURCE REFERENCES:

1	https://www.tutorialspoint.com/software_engineering/
2	https://www.geeksforgeeks.org/software-engineering/

SUGGESTED MOOCs:

1	https://www.edx.org/course/software-engineering-essentials

DELIVERY/INSTRUCTIONAL METHODOLOGIES:

☑CHALK & TALK	☑STUD. ASSIGNMENT	☑WEB RESOURCES	
LCD/SMART BOARDS	STUD. SEMINARS	ADD-ON COURSES	

ASSESSMENT METHODOLOGIES-DIRECT

☑ ASSIGNMENTS	STUD. SEMINARS	☑TESTS/MODEL EXAMS	☑ SEM EXAMINATION
STUD. LAB PRACTICES	STUD. VIVA	☑ PROJECTS	CERTIFICATIONS
ADD-ON COURSES	OTHERS		

ASSESSMENT METHODOLOGIES-INDIRECT

ASSESSMENT OF COURSE OUTCOMES (BY FEEDBACK, ONCE)	☑STUDENT FEEDBACK ON FACULTY (TWICE)
ASSESSMENT OF MINI/MAJOR PROJECTS BY EXT. EXPERTS	OTHERS

Session Outline

Session 1	Software engineering Introduction
Session 2	Software problems and important qualities of a software product
Session 3	software engineering principles. Process Models – The Waterfall Model
Session 4	software engineering principles. Process Models - Prototyping, incremental model
Session 5	software engineering principles. Process Models - Spiral Model, V-Model
Session 6	software engineering principles. Process Models - Agile development
Session 7	Requirement Analysis, Design introduction
Session 8	Understanding Requirements, Requirements Modeling
Session 9	Understanding Requirements, Requirements Modeling:Scenarios, Software requirements specification
Session 10	Understanding Requirements, Requirements Modeling:SRS, Role & Skills of system Analyst

Session 11	Understanding Requirements, Requirements Modeling:Design Concepts, Software Architecture
Session 12	Understanding Requirements, Requirements Modeling: User Interface Design
Session 13	Coding, Testing and Maintenance introduction
Session 14	Coding, Testing and Maintenance introduction - Coding Standards, refactoring, verification, complexity metrics.
Session 15	Coding, Testing and Maintenance introduction - Coding – programming principles and guidelines,Testing – Levels of testing, testing for conventional and object oriented applications
Session 16	Coding, Testing and Maintenance introduction - Testing – Levels of testing, testing for conventional and object oriented applications
Session 17	Coding, Testing and Maintenance introduction - Maintenance – Need for maintenance, Management of maintenance
Session 18	Coding, Testing and Maintenance introduction - challenges of maintenance phase
Session 19	Quality Management Introduction
Session 20	Quality Management - Quality concepts, Software Metrics- LOC based
Session 21	Quality Management - Function point Metric, Quality Metrics
Session 22	Quality Management - Review techniques, software quality assurance
Session 23	Quality Management - Software configuration management
Session 24	Quality Management - Change Management
Session 25	Software Project Management Introduction
Session 26	Software Project Management - Project Management Concepts
Session 27	Software Project Management - Estimation for Software Projects
Session 28	Software Project Management - Project Scheduling
Session 29	Software Project Management – Project Monitoring
Session 30	Software Project Management - Risk Management

CIA Evaluation (25 Marks):

11. **Assignment questions (2.5 Marks)**

Written Assignment

Q. No.	Question	CO
1	Compare the different software development models and decide on the best one.	MCA204.1
3	What is quality assurance and how do you maintain the quality of the product over its lifecycle?	MCA204.2

12. Case Study (2.5 Marks)

Evaluation Criteria	CO
Critique a latest journal paper on software development and management. You can pick your article from the following journals. SQA – Software quality assurance IEEE 730 SCM – Software configuration management IEEE 828 STD – Software test documentation IEEE 829 SRS – Software requirements specification IEEE 830 V&V – Software verification and validation IEEE 1012 SDD – Software design description IEEE 1016 SPM – Software project management IEEE 105 SUD – Software user documentation IEEE 1063	MCA423.5

13. Individual Project (2.5 marks)

Design and develop a solution for a real life problem of their choice approved by the course facilitator

Evaluation Criteria	CO
Meet with the CEO of a software company and figure out the issues and solutions they have implemented in their line of work.	MCA423.5

14. Attendance (2.5 Marks)

Evaluation Criteria	CO
Attendance	MCA423.6

Final (Semester) Evaluation (75 Marks):

1. **Semester Exam**

COURSE INFORMATION SHEET

PROGRAMME : MCA	
COURSE : Data Structures	**SEMESTER :** II
COURSE CODE : MCA 205 **REGULATION :** 2016	**COURSE TYPE** : REGULAR
COURSE AREA/DOMAIN : Programming	**CONTACT HOURS**: 4 hours/Week.

REFERENCE BOOKS:

R	BOOK TITLE/AUTHORS/PUBLICATION
R	Introduction to Algorithms - Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest
R	Fundamentals of data structures – Ellis Horowitz and SartajSahni (Galgotia , 1994)
R	Fundamentals of computer algorithms- Ellis Horowitz, SartajSahni, SanguthevarRajeshekharan (Universities Press , 2007)
R	Data Structure using C & C++ b, Tannenbaum and Augustine,prentice hall.
R	Data Structures – a pseudocode approach with C –Richard F Gilberg, Behrouz A Forouzan, Thomson Learning, 2 Edn., Cengage Learning C2005
R	Data Structures and program design – R. L Kruse (Prentice Hall of India),C2001

COURSE PRE-REQUISITES:

C.CODE	COURSE NAME	DESCRIPTION	SEM
MCA 103	C PROGRAMMING	A basic knowledge of the concept of programming with respect to the variables, loops and functions.	1

COURSE OBJECTIVES:

1	To introduce the concept of linear and nonlinear data structures.
2	To implement the concepts using arrays and linked list
3	To apply it to advanced data structures.

COURSE OUTCOMES:

SNO	DESCRIPTION

MCA205.1	To differentiate the linear and nonlinear data structures
MCA205.2	Implement the various kinds of sorting and searching techniques.
MCA205.3	To implement the concept of nonlinear data structures using arrays and linked list.
MCA205.4	Familiarize the concept of advanced data structures like red black trees, avl trees etc. .
MCA205.5	Implement the concept of balancing a tree and the rotations to do it.
MCA205.6	Adapt to a regular system of teaching learning and assessment, thereby making them professionally ethical.

CO-PO AND CO-PSO MAPPING

	PO 1	PO 2	PO 3	P O 4	PO5	P O 6	PO 7	PO 8	PO 9	P0 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
MCA205.1	3														
MCA205.2			3												
MCA205.3	3		2												
MCA205.4			3												
MCA205.5			2												
MCA205.6															
MCA205.7						3									
MCA205 (overall level)	**3**		**2.5**			**3**									

TOPICS BEYOND SYLLABUS/ADVANCED TOPICS/DESIGN:

SNO	DESCRIPTION	PROPOSED ACTIONS
1	Implement advanced data structures using C	TUTORIAL/LAB
2	Develop any simple DS application using C.	TUTORIAL/LAB

WEB SOURCE REFERENCES:

1	https://www.tutorialspoint.com/data_structures_algorithms/
2	https://www.studytonight.com/data-structures/introduction-to-data-structures
3	https://www.programiz.com/dsa

SUGGESTED MOOCs:

1	https://www.coursera.org/specializations/data-structures-algorithms
2	https://www.edx.org/course/algorithms-and-data-structures

DELIVERY/INSTRUCTIONAL METHODOLOGIES:

☑CHALK & TALK	☑STUD. ASSIGNMENT	☑WEB RESOURCES	
LCD/SMART BOARDS	STUD. SEMINARS	ADD-ON COURSES	

ASSESSMENT METHODOLOGIES-DIRECT

ASSIGNMENTS	STUD. SEMINARS	☑TESTS/MODEL EXAMS	☑ SEM EXAMINATION
☑ STUD. LAB PRACTICES	☑STUD. VIVA	☑ PROJECTS	CERTIFICATIONS
ADD-ON COURSES	☑OTHERS		

ASSESSMENT METHODOLOGIES-INDIRECT

ASSESSMENT OF COURSE OUTCOMES (BY FEEDBACK, ONCE)	☑STUDENT FEEDBACK ON FACULTY (TWICE)
ASSESSMENT OF MINI/MAJOR PROJECTS BY EXT. EXPERTS	OTHERS

CIA Evaluation 25 Marks

1. Written Assignment 2.5 Marks
2. Moodle Quiz 2.5 Marks
3. Viva 2.5 marks
4. Attendance 2.5 Marks
5. CAE 1 & CAE2 15 Marks

Evaluation Criteria	**CO**
Written Assignment	MCA205.1,205.2,205.3
Viva Voce	MCA205.3,205.4,205.5
Moodle Quiz	MCA205.4,205.5
CAE1	MCA 205.1, MCA 205.2
CAE2	MCA 205.3, MCA205.4

Session Outline

Session	Topics	Date
1	Introduction: Data Structures, Data Types, Structure.	
2	Arrays: Ordered lists –Representation of array, Merits and Demerits of array as data structure.	
3	Polynomial Representations, Polynomial addition, Polynomial Multiplication and sparse matrices	
4	Stack: Definition and concepts, Operations on stacks.	
5	Application of stacks- Infix to postfix conversion, Evaluation of Arithmetic Expression.	
6	Queue: Representation of queue, circular queue	
7	Circular queue and double ended queue	
8	Priority queue: implementation by array using Heap Sort	
9	Dynamic Memory Allocation Functions : malloc,calloc,realloc & free	
10	Linked List: Operations – insertion, searching,	
11	Linked List: Operations – removing,updating	
12	Linked List: Operations – sorting and reversing	
13	Linear Data Structures: Linked stacks,	
14	Linked queues, Circular Linked List	
15	Double Ended Queue	
16	Doubly Linked List	
17	Circular Doubly Linked List	
18	Non Linear Data Structures: Trees, Graphs.	
19	Graph: Representation of Graph on Computer: Adjacency matrix and adjacency list, merits and demerits of graph representation	
20	Searching: Linear Search, Binary Search	
21	Trees: Basic terminology, binary trees, binary search tree	
22	Binary search tree: Insertion, Deletion, searching and Traversal - in-order, pre-order and post-order	

23	Binary search tree: Insertion, Deletion, searching and Traversal - in-order, pre-order and post-order	
24	Threaded Binary Tree: Operations	
25	Balanced Trees: AVL Tree: properties, insertion, deletion and rotations	
26	Advanced Data Structures: Red black tree: properties	
27	B-Trees: Data Structure on secondary storage, Definition of B trees, Basic operations on B Trees – searching	
28	Creating an empty node, splitting a node in B Tree, Inserting a key in to B Tree and Deleting a Key from a B Tree	
29	Definition and Structure: B+ Trees, Data Structure for Disjoint Sets: Disjoint set operation	
30	Linked list representation of disjoint sets, Disjoint-set forests	

Final (Semester) Evaluation (75 Marks):

1. Semester Exam

C++ Lab

Course Code	*MCA206*	***Course Title***	*C++ Lab*
Course Type	*Core*	***Contact Hours***	*4 Hours per Week*
Credit	*4*	***Domain***	*Computing*
Syllabus			
I	**Lab Cycle A** 1. Program to Implement Classes and Objects. 2. Program to Implement Constructors and Destructors with array of Objects. 3. Program to Implement Passing and returning parameters as objects by reference. 4. Program to demonstrate Function Overloading. 5. Program to overload different operators – ++ & -- operators with post & pre 6. forms; new, delete, [], () and arithmetic operators. 7. Program to perform pointer sort operation. 8. Program to demonstrate friend functions and friend classes. 9. Program using objects for String manipulation functions. 10. Program to implement different types of inheritances like Multiple, Multilevel and Hybrid. **11.** Program to demonstrate the use of Virtual Functions		
II	**Lab Cycle B** 1. Program to demonstrate I/O streams and functions. 2. Program to Overload << and >> operators as a member and as a non-member operator functions. 3. Program to create a file to store some records and search for a particular record and display it. 4. Program to perform all possible Type Conversions. Program to create function Templates, and overload the function Templates. 5. Program to create a generic stack class and member functions to perform stack operations. 6. Program to implement Exception Handling with minimum 5 exception classes including two built-in exceptions (use Visual C++)		
TEXT/REFERENCE BOOKS:			
R	Object oriented Programming with c++. Balagursamy 4th edition or above		
R	Deitel&Deitel, C++ How to program, Pearson Education Asia, 7th Edition, 2010.		
R	Computer Science: A Structured Programming Approach Using C++, Forouzan, Thomson Learning , 2 Edn		
R	C++ Programming: Malik, Thomson Learning , 3 Edn		
R	K.R VenugopalRajkumar, Mastering C++ , TMH.		
R	Gaddis Tony, Starting Out with C++, dreamtech Press,		
R	Sotter A Nicholas and Kleper J Scott, Professional C++, Wiley Publishing Inc.		
R	Schildt Herbert, The Complete Reference C++, Tata McGraw Hill, 4th Edition		
COURSE PRE-REQUISITES:			
MCA203			
COURSE OBJECTIVES:			
1. To Achieve an understanding of object oriented programming concepts using C++ 2. To apply C++ programming language to solve real world problems			
COURSE OUTCOMES:			
CO. No	**Course Outcome description**		
MCA206.1	To develop programs with object oriented programming concepts using C++.		
MCA206.2	To implement generic programming		
MCA206.3	To implement exception handling		

MCA206.4	Adapt to a regular system of teaching learning and assessment, thereby making them professionally ethical.

CO-PO AND CO-PSO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	P010	PO11	PO12	PSO1	PSO2	PSO3	PSO4
MCA206.1	3	3	3													
MCA206.2			3													
MCA206.3	2		2													
MCA206.4						3										

COURSE INFORMATION SHEET

PROGRAMME : MCA	
COURSE : **DATA STRUCTURES LAB**	SEMESTER **: II**
COURSE CODE : **MCA 207** REGULATION : **2016**	COURSE TYPE : **REGULAR**
COURSE AREA/DOMAIN **: Programming**	CONTACT HOURS: **4 hours/Week.**

Lab Cycle

- Program to represent Searching procedures (Linear search and Binary search)
- Program to represent sorting procedures (Selection , Bubble , Insertion)
- Polynomial addition using array
- Polynomial multiplication using array
- Program to represent sparse matrix manipulation using arrays.
- Program to allocate two dimensional arrays dynamically.
- Program to demonstrate the use of realloc().
- Represent Graph using array
- Stack using array
- Reverse a string using stack
- Implement Queue using array
- Circular Queue using array
- Double ended queue using array
- Program to represent Singly Linked List.
- Program to represent Doubly Linked List.
- Program to represent Circular Linked List.
- Polynomial addition using Linked List.
- Polynomial multiplication using linked list.
- Implement a linked stack
- Program to represent Queue using linked list
- Represent a graph using linked list.

- Program for Conversion of infix to postfix.
- Program for Evaluation of Expressions.
- Program for binary search tree using recursion.
- Program to represent Binary search Tree Traversals without recursi

REFERENCE BOOKS:

R	BOOK TITLE/AUTHORS/PUBLICATION
R	Foley J.D. ,Andries van Dam, Computer Graphics(latest) - Principles and Practice, , Addison-Wesley.
R	Angel, Edward. Interactive Computer Graphics- A Top-down Approach with OpenGL, Addison-Wesley,1996.
R	Computer Graphics using OpenGL F S Hill – Prentice Hall
R	Goemetric tools for Computer Graphics – Philip J. Schneider and David H. Eberly – The Morgan Kaufman series in Compter Graphics & Modeling
R	Tom McReynolds – David Blythe " Advanced Graphics Programming Using OpenGL" , Elsevier, 2010
R	Ralf Steinmetz and Klara "Multimedia Computing, Communications and applications", Pearson Education, 2004.

COURSE PRE-REQUISITES:

C.CODE	COURSE NAME	DESCRIPTION	SEM
MCA 103	C PROGRAMMING	A basic knowledge of the concept of programming with respect to the variables, loops and functions.	3

COURSE OBJECTIVES:

1	To develop programs to implement the concept of data structures

2	To implement the concepts of data structures using arrays and linked list
3	To implement the concepts of advanced data structures

COURSE OUTCOMES:

SNO	DESCRIPTION
MCA207.1	To implement the linear data structures like arrays, linked list.
MCA207.2	To implement the various kinds of sorting and searching techniques.
MCA207.3	To implement the concept of stacks using arrays and linked list.
MCA207.4	To implement the concept of queues using arrays and linked list.
MCA207.5	To implement the concept of nonlinear data structures like graphs and trees.
MCA207.6	Adapt to a regular system of teaching learning and assessment, thereby making them professionally ethical.

CO-PO AND CO-PSO MAPPING

	PO 1	PO 2	PO 3	P O 4	PO5	P O 6	PO 7	PO 8	PO 9	P0 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
MCA207.1	3		3												
MCA207.2	3		3												
MCA207.3	3		2												
MCA207.4	3		2												
MCA207.5			2												
MCA207.6						3									
MCA207 (overall level)	**3**		**2.4**			**3**									

TOPICS BEYOND SYLLABUS/ADVANCED TOPICS/DESIGN:

SNO	DESCRIPTION	PROPOSED ACTIONS
1	Implement simple applications of Data structures.	TUTORIAL/LAB

2	Develop any simple application for advanced data structure concept.	TUTORIAL/LAB

WEB SOURCE REFERENCES:

1	https://www.tutorialspoint.com/data_structures_algorithms
2	https://www.studytonight.com/data-structures/introduction-to-data-structures
3	https://www.programiz.com/dsa

SUGGESTED MOOCs:

1	https://www.coursera.org/specializations/data-structures-algorithms
2	https://www.edx.org/course/algorithms-and-data-structures

DELIVERY/INSTRUCTIONAL METHODOLOGIES:

☑CHALK & TALK	☑STUD. ASSIGNMENT	☑WEB RESOURCES	
LCD/SMART BOARDS	STUD. SEMINARS	ADD-ON COURSES	

ASSESSMENT METHODOLOGIES-DIRECT

ASSIGNMENTS	STUD. SEMINARS	☑TESTS/MODEL EXAMS	☑ SEM EXAMINATION
☑ STUD. LAB PRACTICES	☑STUD. VIVA	☑ PROJECTS	CERTIFICATIONS
ADD-ON COURSES	☑OTHERS		

ASSESSMENT METHODOLOGIES-INDIRECT

ASSESSMENT OF COURSE OUTCOMES (BY FEEDBACK, ONCE)	☑STUDENT FEEDBACK ON FACULTY (TWICE)
ASSESSMENT OF MINI/MAJOR PROJECTS BY EXT. EXPERTS	OTHERS

CIA Evaluation 25 Marks

1. Lab Performance 2.5 Marks
2. Moodle Quiz 2.5 Marks
3. Viva 2.5 marks
4. Attendance 2.5 Marks
5. CAE P 15 Marks

Evaluation Criteria	**CO**
Lab Performance	MCA207.1,207.2,207.3,207.4,207.5
Viva Voce	MCA207.1,207.2,207.3
Moodle Quiz	MCA207.4,207.5
CAEP	MCA207.1,207.2,207.3,207.4

Session Outline

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Session	**Topics**	**Date**
1	Program to implement linear search.	
2	Program to implement binary search.	
3	Program to implement bubble sort.	
4	Program to implement selection sort.	
5	Program to implement quick sort.	
6	Program to implement insertion sort.	
7	Polynomial addition using array.	
8	Polynomial multiplication using array.	
9	Program to represent sparse matrix using arrays.	
10	Program to represent sparse matrix manipulation using arrays.	
11	Program to allocate two dimensional arrays dynamically.	
12	Program to demonstrate the use of realloc().	
13	Represent Graph using array.	
14	Stack using array.	
15	Reverse a string using stack.	

16	Implement Queue using array.	
17	Circular Queue using array.	
18	Double ended queue using array.	
19	Program to represent Singly Linked List.	
20	Program to represent Doubly Linked List.	
21	Program to represent Circular Linked List.	
22	Polynomial addition using Linked List.	
23	Polynomial multiplication using linked list.	
24	Implement a linked stack.	
25	Program to represent Queue using linked list.	
26	Represent a graph using linked list.	
27	Program for Conversion of infix to postfix.	
28	Program for Evaluation of Expressions.	
29	Program for binary search tree using recursion.	
30	Program to represent Binary search Tree Traversals without recursion	

Final (Semester) Evaluation (75 Marks):

2. **Semester Exam**

COURSE INFORMATION SHEET

PROGRAMME : MCA	
COURSE : **ENGLISH FOR COMMUNICATION**	SEMESTER **: II**
COURSE CODE : **AOC-2** REGULATION :	COURSE TYPE : **Add-On Course**
COURSE AREA/DOMAIN **: LANGUAGE**	CONTACT HOURS: **2 hours / Week.**

SYLLABUS

'English for Communication' aims at catering to the increasing need for effective communication skills in higher education. It is a platform for undergraduate and postgraduate students to understand, master and apply the principles of communication for effective management of personal and professional life.

The certificate course, though specifically designed to meet the requirements of various schools and departments within the institution, complies with the University Grants Commission's mission to improve career prospects through career-oriented add-on courses. The course offers state-of-the- art teaching-learning experience using language lab, learning through games and simulations to standardize and enhance the English language proficiency levels of the students.

The course offered in cafeteria model, where the syllabus and contact hours are flexible. With specific learning outcome envisaged, the course, however, gives the instructor the freedom to adopt methodology used in English for Specific Purposes (ESP). A certificate with the seal of the college will be awarded at the end of the basic and advanced levels separately based on the average score accrued by the student and on his/her successful completion of the continuous internal and external assessments within the stipulated time frame.

Session Topics

LEVEL -I		
Sessions	**Topic**	**Methodology**
1-4	Elements of Communication,Phonetic Training Speak Out (Self Introduction)	Lecture & Video Screening, language lab, activity
5-6	Building Deeper Relations with the Johari Window	Lecture and Activity
7-8	Barriers to Communication – Physical, Psychological, Cultural & Semantic	Lecture & Role Play
9-10	Listening as a Communication Skill – Casual Listening, Listening for Information, Intensive Listening, Empathetic Listening – Poor Listening Habits	Lecture & Activity

11-12	Nonverbal Communication – Significance of Kinesics, Proxemics &Haptics	Lecture & Video Presentation
13-15	Public Speaking - Importance of Public Speaking - Qualities of a Good Speaker	Video Mediated lecture and Speaking Activity
16-17	Designing and Delivering Power Point Presentations – Organizing the Content - Designing Compelling Presentation Visuals - Delivery Style	Lecture & Assignment - Creating PPTs & Presentations
18-19	Etiquette Advantage in Communication – Introductions and Greetings – Dressing and Grooming - Table Manners	Video Mediated Lecture & Presentation
19-20	Critical Thinking – Logos - Reason in Daily Communication- Fallacies, post truth	Lecture & Activity - Analysis of a Viral Video

COURSE MATERIALS

The list of materials provide a sense of direction to both the instructor and the students in making the right choice of reference for successful completion of the course.

BOOKS:

Sanghita Sen, Alanrita Mahenda, Priyadarshini Patnaik - *Communication and Language Skills*- Cambridge University Press

V. Sasikumar, P. Kiranmayi Dutt, Geetha Rajeevan – *Listening and Speaking* –Foundation Books

Sabina Pillai – *Spoken English for My World* – Oxford University Press

GeethaRajeevan - *Write Rightly*– Foundation Books

Steve Hart, Aravind R Nair, Veena Bambhani - *EMBARK* – Cambridge University Press

Wren & Martin – *High School English Grammar*–Blackie

ARTICLES:

Anjali Hans & Emmanuel Hans – 'Kinesics, Hepatics and Proxemics: Aspects of Non-Verbal Communication' –IOSR- JHSS

TJohn W. NewstromStephen A. Rubenfeld - THE JOHARI WINDOW: A RECONCEPTUALIZATION -Developments in Business Simulation & Experiential Exercises, Volume 10, 1983

METHODOLOGY OF TEACHING

1. Lecture, audio &video mediated interaction and language lab software based instruction are the major methods to effectively conduct the sessions. Role-play,skits, games andtask-oriented activities to be incorporated in language acquisition through simulation.
2. The instructor is free to choose the course materials from the reference texts provided; the material chosen should comply with the methodology provided in the syllabus.

3. Language lab software to be utilizedto improve the Listening and Speaking Skills of the students.
4. Regular meetings of instructors to be organized to ensure uniformity in teaching methodology.
5. Regular ICT training to be provided to instructors.

EVALUATION PATTERN

The assessment is a tripartite system and accounts for the overall grade.

Assessment Components	Weight (%)
Final Exam: Group Discussion & Interview Listening & Speaking (Online Test) Writing, Comprehension& Language Proficiency (Online Test)	 25 25 20
Internal Exam	20
Attendance	10

Attendance: (Weightage - 10 Points)

Based on College and University patterns.

Internal Assessment: (Weightage - 20 Points)

1. Public Speaking & Presentation Skills (For Level-I)

The candidate will give a presentation related to personal aspirations, job or career intentions and/or interests to a defined audience. Audio and/or visual aids may be used.
Maximum time: 10 minutes for each student
Weightage: 10 Points

Final Assessment: (Weightage - 70 Points)

Assessment Components	Points
GD & Presentation Skills	25
Speaking Skills (Online Test)	25
English Language Proficiency (Online Test)	20

Distribution of Letter Grades

COURSE ASSESSMENT: Space for the components of assessment and weightage for each component

Assessment Components	Weight (%)
GD & Presentation Skills	XX
Speaking Skills (Online Speaking Test)	XX
English Language Proficiency (Online Grammar, Comprehension and Writing Test)	XX
Attendance	XX
TOTAL	**100**

Grading Scheme for AOC	
Points	**Grade**
90-100	S
80-89	A
70-79	B
60-69	C
50-59	D

COURSE PLAN

MHRM Semester 4

2017-19 Batch

CONTENTS

COURSE & COURSE CODE	CREDITS	PAGE NO:
Strategic Human Resource Management - CC401	3	1
Software Project Management - EC402	3	6
Global Human Resource Management - EC406	3	9
Human Resource Accounting & Auditing - EC405	3	12
Employee Counseling - EC403	3	16
Human Resource Information Systems - EC407	3	21

STRATEGIC HUMAN RESOURCE MANAGEMENT - CC401

Course instructor	Sem, Programme & Batch	Email
Prof. Shelly Jose	IV Sem MHRM 2017-19	shellyjose@rajagiri.edu

1. About SHRM Course

The Human Resource Management profession has transformed over the years as to be a partner in the business. The course seeks to highlight the significant role of Human Resource Management in generating and maintaining competitive advantage. By successfully completing this course the student is expected to conceptualize HRM in relation to the business as overarching and involving vertical linkages at the industry, business and functional levels and horizontal linkages with each of the functional areas of HR itself. By so conceptualizing it is also expected that their practice of HR is integrative and synthesizing as against stand alone or merely supportive.

2. Course Learning Objectives mapped to Programme Learning Objectives (PLOs)

i. ***PLO 1b: Our graduates will demonstrate strategic long term orientation.**
ii. To develop whole system thinking about business in relation to its environment.
iii. To understand the linkages between HR practices, HR outcomes and organizational level outcomes
iv. To equip students design HR systems in line with iii above.

3. Session Plan

3a Modules

Module 1: Strategic Management: Nature and significance of strategic management, dimensions of Strategic Decisions; Formality in Strategic Management, value of Strategic Management. Strategic Management Model and its components, Limitations of Strategic Management.

3. **Module 2:** Strategy Formulation: Formulating a company Vision, Mission, Objectives and Goals; Analysing the Environment; Forces influencing strategy Formulation: SWOT, Portfolio Models, Porter's Model, Generic strategies, Environment forecasting, analysing the company profiles, formulating long-term Objectives and Grand strategies. Strategy Analysis and choice. Evaluating Multinational Environments.

4. **Module 3**: Strategy implementation: Operationalizing the Strategy, Annual objectives, Functional strategies and Business Policy, Institutionalizing the strategy: structure, leadership and culture; Guiding and Evaluating the strategy corporate strategy and global strategy.

Module 4 : Human Resource Strategy: Concept, Approaches, HRS and Business Strategy; Role of HRM in formulating Corporate Strategy, HR strategy and Functional Strategy. Change management, Assumption: Intentions, Implementation and interpretation, Change management strategies: Training and Development Strategies; Performance Management strategies; Industrial and work place relations strategies, Culture - organizational performance and Human Resource Strategy; International Human Resource Strategy; HRM Strategy and difficulties in its implementation.

Module 5 : New Economic Policy and HRM strategy; Co-operative Human Resource Strategy; Role of Human Resource in Strategy Formulation; integrating Human Resources in Strategic Decisions; Human Resource as a Strategic Partner, HRS and HRIS; Human Resource Strategy - some key issues; HRM Strategy for Future.

3b Session Plan

Session	Topic	Reading
1- 2	Introduction to Strategic Management	What is strategy?
		The Southwest airlines way
3-4		Introduction to Strategic Management
		What is Strategic Management
5 -6		Theory of the business
		Strategic Intent
7 - 8		Core competence of the Corporation
		Value chain, network and shop
9 -10		Competitive strategy, the core concepts
		Predators and Prey
11 -12	Strategy and Structure	Portfolio approach
		Structuring of organisations
13 -14		Structure is not organisation
	HR strategy	What is HR strategy
15 -16		Intangible resources
		RBV
17 -18		HRM an RBV
		Understanding dynamic capabilities
19 - 20		Understanding HRM – Firm performance linkages
		Linking Corporate strategy and HR strategy
21 - 22	HR and Firm Performance	HR Era of our ways
		Modes of theorising delery and doty
23 -24		Miles and Snow
		Competing on resources
25 - 26		HR scorecard, Evidence based HR, HR analytics,
		Producing sustainable competitive advantage through effective management of people

27 - 28	Strategic HRM	Culture and improvement initiatives
		Soft an Hard models of HR
29 -30		HR systems and SCA A competency based view.
		SHRM Where have we come from and where are we going
31 -32		SHRM in five leading firms
		Vital role of strategy in SHRM
33 -34	HRM and effectiveness	Theoretical perspectives for SHRM
		Strategic HRM and Organizational Behavior: Integrating Multiple Levels of Analysis
35 -36		SW Airlines Putting service – profit chain to work
		Consistent HR practices, the whole can be more than the sum of the parts
37 -38	HR and Competencies	HRM in emerging companies
		Strategic HRM linking people with the strategic needs of the business
39 -40		Distinctive HR are firms core competencies
		HRD practices and philosophy of management in Indian organisations
41- 42		Differentiating your workforce strategy
		The future of work motivation theory
43 -44	Future of HRM	Developing actionable strategy
		Coevolutionary integration: The co-creation of a new organizational form following a merger and acquisition
45 - 47		Compensation Strategy
		Organisational Strategy, Structure and process.. miles and Snow
		Evidence based HR

5. References/Books

	Title	**Author**
1	Strategic management: A South Asian perspective	Hitt, Ireland, Hoskisson, manikutty
2	Principles of operations Management	Haner, Render
4	Competing for the Future; Harvard Business School Press, Boston.	Hamel, Gary and Prahalad, C.K.,
5	Strategic Management,	Sharplin, Arthur;
6	Managing for the Future;	Drucker, Peter P.,
7	Innovative Corporate Turnarounds;	Khandwalla, Pradeep N.
8	Strategic Human Resource Management,	Mabey, Christopher and Salaman, Graeme;

9	Human Resource Strategies,	Salaman, Graeme;
10	Corporate Strategy and the Human Resource	Stanley, Ken and Mc Kinlay, Alan;
11	The Mind of the strategist	Kenichi Ohmae
12	Strategic Human Resource Management	Michael Armstrong
13	Strategic HRM	Jeffrey De Mello

6. Grading Structure

Evaluation tool	Marks	PLOs assessed
End Semester Examination	**60**	
CAE-1	**7.5**	
CAE-2	**7.5**	**PLO 1b**
Individual Assignment	**12**	
Class participation	**13**	
Total	**100 marks**	

7. Grading or Evaluation tools other than Examinations

Individual assignment – Article Presentation (12 marks)

Each student is given an article. The student is to prepare the article and anchor a ppt presentation with inputs from the course facilitator. The class presentations shall take place in the sequence given.

Assessment criteria would be the work put in by the student in understanding the concepts, clarity of thought and presentations the effort taken by the student in collecting appropriate additional inputs from other sources including presentations prior in the order.

Class Participation (13 marks)

The learning process is heavily dependent on participation and follows a discussion mode anchored by the presenter and facilitated by the course instructor. The students are assessed for participation in the presentations and other inputs/ exercises in the class. Meaningful contributions, additions, clarifications and demonstrated progress throughout the course shall be the evaluation criteria.

8. Assignment Schedule
As in 3b above

9. Course requirements

The articles are made pre available in the common folder (\tiger\MHRM2017\SHRM). The sequencing of presentations is done to match the attendance order. Presentations shall commence after introductory sessions. There shall be enrichment interventions by the course facilitator between and during the sessions. At least four students are required to be ready with the presentations on a day any day. All students are required to come prepared for each session by reading the respective articles for the day. Since the articles are available in advance, all are assumed to be prepared irrespective of the actual date of presentation.

Sign:

Name:
AOL Endorsement

Sign:	Sign:	Sign:
Name: **Area Chair**	Name: **Programme Chair**	Name: **Dean (Academics)**

SOFTWARE PROJECT MANAGEMENT - EC402

Course Instructor

Name	Sem, Programme & Batch	Email
Prof. Sreejith R	Sem 4 MHRM 2017-2019	sreejithr@rajagiri.edu

1. About the Course

This course will provide the student with the necessary knowledge about project management principles and methods to manage a software development project. It would enable him/her to understand the basic concepts embodied in software development life cycle models, representation of a software life cycle for an organization or project and to effectively monitor a software development project. Building awareness of the social and environmental factors that contribute to software development activities.

2. Course Learning objectives aligned with programme Learning Objectives (PLOs)

a. To gain understanding of the fundamental principles of Project Management.
b. To relate the application of Project Management principles in Software Project Management.
c. To acquire familiarity of the different methods and techniques used for Software Project Management.
d. Develop the skills for identifying issues and implement perfect software deliverables. (PLO 1d)

***PLO 1d: Our graduates will be conscious of implementation issues or consequences.**

3. Session Plan

Session	Topics	Reading	Methodology

1-2
3-4
4-6
5-8
	Module I- Project Management
	• Project Management
	  o Introduction
	• Project ideas
	  o Screening project ideas
	• Project feasibility
	  o Market opportunity analysis
	  o Technical feasibility
	  o Financial feasibility
	• Project scheduling
	  o Use of network techniques
		Book 1: Chapter 1
		Book 3: Chapter 1, 4
			Lecture

9-10
11-12
13-14
	Module II – Software Development Overview
	• Software engineering
	• Impact of software engineering on software development Software Life Cycle
	  o Life cycle models
	  o Implementation of life cycle model
	  o Application of the cycle models
		Book 3: Chapter 2	Lecture

15-16
 	
17-18
19-20
	Module III – Planning the software project
	• Structure of plan components
	  o Technical plan
	  o Resources plan
	• Quality considerations
	• Levels of planning
	  o Project plans
	  o State plans
	  o Detailed plans
	  o Individual work plans
	  o Execution Plan
	• Planning guidelines
		Book 3: Chapter 4	Lecture

21-22
 	
23-34
 	
25-26
 	
27-28
	Module IV – Project Monitoring and Control
	• Project Monitoring and Control
	  o Project initiation
	  o End-stage assessment
	  o Mid-stage assessment
	  o Checkpoints
	  o Project closure
	• Project measurement & review
	  o Quality review
	  o Technical exceptions
	  o Configuration management
	• Quality assurance
	  o Quality concepts
	  o Quality planning
	  o Quality review
	  o Quality characteristics
		Book 3: Chapter 3, 8	Lecture

27-28
 	
29-30
	Module V – Productivity guidelines
	• Software packages
	  o Productivity attributes
	  o Productivity tools & their selection
	• Establishing a productivity improvement program
	  o Motivation factors for software development.
		Book 3: Chapter 9	Lecture

4. References/Books

- Book 1: A Guide to the Project Management Body of Knowledge (PMI), 5th Ed. *(will be uploaded on Moodle)*
- Book 2: Project Management. Mantel S.J., Meredith J. R. et. al.. Wiley India Ed..
- Book 3: Information Technology Project Management, Kathy Schwalbe. Cengage Learning, 01-Jan-2013
- Book 4: Software Project Management by Bob Hushes and Mike Cotterell, Latest Publication
- Book 5: Software Project Management – Rajeev Chopra, 2009
- Book 6: Software Project Management, Walker Royce, 1998, Addison Wesley

5. Grading Structure

End Semester Examination (ESE)	60 marks
CAE - 1	7.5 marks
CAE - 2	7.5 marks
Group Project	5 marks
Group Presentation	10 marks
Individual Assignment	10 marks
Total	**100 marks**

6. Assessment tools other than Examinations

- **Group Project**

Student groups will work on an imaginary project to be built on a subject of their choice. The project can involve the development of a software alone or even encompass a system view involving both hardware and software. Develop a project plan for the development of the software.

- **Group Presentation**

Student groups will be assigned with a topic to present in class.

- **Individual Assignment**

Moodle based assignments shall be given to the class for individual submission.

7. Course policies

Please refer student guidelines

8. Assignment/presentation Schedule

Date	Assignment/presentation	Due date
Session 10,15	Written Assignment	Session 15,20
Session 14	Group Presentations	Session 16 – Group 1 (to be followed by other groups in subsequent classes)
Session 10	Group Project	Weekly submissions + Session

9. Course requirements

Students are required to come prepared for each session by reading the respective reference material given in this course plan.

Sign:

Name:
AOL Endorsement

Sign:	Sign:	Sign:
Name: **Area Chair**	Name: **Programme Chair**	Name: **Dean (Academics)**

GLOBAL HUMAN RESOURCE MANAGEMENT (GHRM) - EC406

Course facilitator

Name	Sem, Programme & Batch	Email
Prof. Siby Jose	IV Sem MHRM (2017-10)	sibyjose@rajagiri.edu

1. About GHRM Course

The course is meant to give an overview of international practices and trends in the field of Human Resource Management. Multinational and Global organizations are the main focus in this course. The implications of operating in different cultures and customizing and standardizing human resource systems for operational effectiveness would also be understood.

2. Course Learning Objectives mapped to Programme Learning Objectives (PLOs)

i. To understand human resource management practices in different countries/cultures
ii. To appreciate the culture differences and diversity in different corporate settings (PLO3c)
iii. To explore the compensation and performance management practices in multi national companies

***PLO 3c: Our graduates will evince etiquette in different corporate settings.**

3. Session Plan

Session	Topic	Reading	Methodology
1 & 2	**Module I** Organizational structure of multinational corporations – models. Strategic planning in multinational corporation.	Hill : Chapter 14 Article : 6	Lecture and Discussion
3 & 4	International human resource management (IHRM): concept, scope and significance, multinational corporations and cultural dimension – models & theories	Hill Chapters 4 & 19	Lecture and Discussion
5 & 6	**Module II** IHRM - cross national differences in personnel and organization policies, Sources of human resources - home-country nationals, host-country nationals, third-country nationals.	Hill Chapters 19	Lecture and Discussion
7 & 8	Selection criteria for international assignments: international human resource selection procedures. Adaptability to cultural change, physical and emotional health, motivation for a foreign assignment. Leadership ability, language training and IHR selection procedures	Dowling : Chapter 5	Lecture and Discussion
9 & 10	**Module III** Compensation and performance appraisal - An international perspective.	Dowling : Chapters 7 & 11	Lecture and Discussion
11 & 12	Multinational corporations and compensation systems. Common elements of compensation packages: Pay, bonus, stock option, incentives. Performance appraisal systems	Dowling : Chapters 7 & 11 Hill : Chapter 19	Lecture and Discussion
13 & 14	**Module IV**	Dowling : Chapters 6	Lecture and

	Training and development of international staff - Objects and considerations, areas and types of training programmes. The technicalities of training.		Discussion
15 & 16	Cultural assimilators. OD in international settings. Global leadership development	Article : 3 & 1	Lecture & Discussion
17 & 18	**Module V** Transnational industrial relations; labour relations in the international perspective; Conflict resolution, & common forms of industrial democracy in multinational corporations.	Dowling : Chapters 10	Lecture and Discussion
19 & 20	Union organization and labour relations at the enterprise level in MNCS - future directions of IHRM.	Dowling : Chapters 10	Lecture & Discussion
21 onwards	Group and individual student presentations.		

4. Reference Books

1. Dowling, P., Festing, M., & Engle, A. D. (2007). International human resources management. Cengage Learning.
2. Hill, C. (2008). International business: Competing in the global market place. McGraw-Hill/Irwin.

Articles

1. Alon, I., & Higgins, J. M. (2005). Global leadership success through emotional and cultural intelligences. *Business horizons*, *48*(6), 501-512.
2. Black, J. S., & Gregersen, H. B. (1999). The right way to manage expats. *Harvard business review*, *77*(2), 52-59.
3. Fiedler, F. E., Mitchell, T., & Triandis, H. C. (1971). The culture assimilator: An approach to cross-cultural training. *Journal of applied psychology*, *55*(2), 95.
4. Harvey, M., & Moeller, M. (2009). Expatriate mangers: A historical review. *International Journal of management reviews*, *11*(3), 275-296.
5. Johnson, J. P., Lenartowicz, T., & Apud, S. (2006). Cross-cultural competence in international business: Toward a definition and a model. *Journal of international business studies*, *37*(4), 525-543.
6. Mintzberg, H. (1994). The fall and rise of strategic planning. *Harvard business review*, *72*(1), 107-114.
7. Smockum. E., "Don't Forget the Trailing Spouse," Financial Times, May 6, 1998, p. 22;
8. Wong. E, "China's Export of Labor Faces Growing Scorn," The New York Times, December 21, 2009.

5. Grading Structure

Component	Marks	PLOs assessed
End Semester Examination (ESE)	60	
CAE-1	7.5	
CAE-2	7.5	
Written assignment & Individual presentation	15	
Group presentation	10	PLO3c
	100	

6. Grading or Evaluation tools other than Examinations

Written assignment & Individual presentation
Each student shall be assigned a country and the students have to submit a report (approximately 5,000 words) on Political, Economic, Social, Technological, Legal, and Environmental factors of the country. The report should also include the demographic pattern of the population and human resource management policies of the country. An abridged version of the report has to be presented in the class.

Group presentation
Shall be discussed in the class

7. Course policies
Please refer student guidelines.

8. Assignment Schedule

Date/Session	Assignment/presentation	Due date/session
Session 1	Presentation topics	
Session 1	Presentations : 3 groups	**Session 21,22**
Session 1	Presentations : 3 groups	Session 23,24
Session 1	Presentations : 1 group	Session 25
	Individual presentation – Session 25 onwards	

9. Course requirements
Students are required to come prepared for each session by reading the respective reference material given in this course plan.

Sign:

Name:
AOL Endorsement

Sign:	Sign:	Sign:
Name: **Area Chair**	Name: **Programme Chair**	Name: **Dean (Academics)**

HUMAN RESOURCE ACCOUNTING AND AUDITING - EC405

A. Course instructors

Name	Sem, Programme & Batch	Email
Dr Jayasri Indiran	HRAA-S-IV MHRM 2017-19	jayasri@rajagiri.edu

1. **About the Human Resource Accounting and Auditing Course:**
   The Course Human Resource Accounting and Auditing is a technical subject in which the learners are expected to learn the investments and allocations of funds on Human Resources of organizations. By knowing the monetary worth of human resources, it is easier for an HR Professional to invest the investors' money appropriately and utilise them without any wastage of labour and money. In giving a broader knowledge on HR Accounting and Auditing, the course is devised compositely with the basics of HR Accounting, Procedures and Processes involved in accounting human resources, Cost Control Mechanisms and Wastage Reduction especially in terms of human resource as an essential factor of production.

2. **Course Learning Objectives mapped to Programme Learning Objectives (PLOs):**
   a. Understanding the basics of Human Resource Planning and investment in human capital in alignment with the business capital investment
   b. Understanding the basics of Human Resource Accounting and relevant approaches and HR costs **(PLO 1c)**
   c. Managing organizational climate in line with HR Accounting
   d. Understanding Responsibility Accounting and Social Accounting with Management Control on HR Accounting
   e. Understanding the basics of HR Auditing, process and techniques

   ***PLO 1c: Our graduates will be able to generate multiple alternatives while resolving a problem or issue.**

3. **Session Plan:**

Session	Topics	Reading Ref. No. (Respective Chapters)	Pedagogy
1-2	**Module-I: Human Resource Planning:** Meaning and definition, importance, Natural Resources and Human resources, Investment in Human Resources, Efficient use of Human Resource, Modern market investment theory, Market Portfolio	TWS Ch: 1&2	Model-based Discussion
3-4	Enumerating the assets, Calculating the market value of assets, Human Capital as an illiquid and non-marketable assets		Class Exercise &
5-6	Human Capital, Investment in Human Capital, Education, Training and Development, Expenditure and Productivity		**Assignment – 1:** Human Capita Need Analysis
7-8	**Module-II: Human Resource Accounting**: Concept, Objectives, Converting Human data into money value,	KEH & LS Ch: 1&2	Bloomberg Business Week Article Discussion

	Limitations of Human Resource Accounting		
9-10	Approaches to Human Resource Accounting - Investment approach, Investment in human resources, Recruiting and Training Costs		
11-12	Depreciation, Rates of Return, Measuring return on human assets, Prevention of Human Resource Wastage		Class Exercise
13-14	**Module-III: Organizational Climate & HR Accounting:** Organizational Climate Approach - Improvement and determination of organizational climate	RPG Ch: 7	Model based discussion
15-16	Determination of changes in Human Resources Variables - increased costs, cost reduction and future performance		
17-18	Module-IV: **Responsibility accounting and Management Control**: Management Control structure and process, classification of cost in responsibility accounting	RPG Ch: 9 PBS Ch: 5 & 7	**Assignment – 2:** Responsibility Auditing (Role Play)
19-20	Behavioral aspects of Management control. Human Resources as social capital, Mentoring and development of social capital, Social control, HR accounting and bench-marking		Case & Model based discussion
21-22	**Module-V: Personnel / HR Costs, Auditing and Accounting:** Personnel / HR Costs and Audit Techniques, HR Audit, HRD Audit	KEH & LS Ch: 6&7 DPR Ch:9	Model based discussion
22-24	Balance Score Card, HRD Score Card - Accounting and Financial Statements		Case Analysis

4. **References / Books:**

i. Theodre W. Schultz **(TWS)**, "Investment in Human Capital", The American Review, Vol. I

ii. Kaplan E. H. and Landekich, S. **(KEH & LS),** "Human Resource Accounting: Past, Present and Future"

iii. R.P. Gupta **(RPG),** Human Resource Management and Accounting.

iv. P. Subbarao & V.S.P. Rao, **(PS & VSPR),** Personnel / Human Resource Management (Text, Cases and Games)

v. A.R. Sharma **(ARS),** Personnel / Human Resource Management

vi. Pragnesh B Shah **(PBS),** Human Resource Accounting, Serials Publications (Pvt.) Ltd., New Delhi, 2010

vii. D Prabhakara Rao **(DPR),** Human Resource Accounting, Inter-India Publications, New Delhi, 1986

viii. Bloomberg Business Week **(BBW),** September 29, 2017, Annual Review Plus Frequent Coaching Boosts Job Performance

5. Grading Structure – MBA and MHRM

Evaluation tool	Marks	PLOs assessed (assessed
End Semester Examination	60	
CAE-1	7.5	
CAE-2	7.5	**PLO 1c (Rubric)**
*** Human Capital Need Analysis (Infosys Case Analysis – Conceptual Clarity Rubrics **– Individual Written Assignment**)	10	
Responsibility Accounting Role Play	15	
Total	**100 marks**	

*****Conceptual Clarity Rubrics follows:**

Rubric Category	Unacceptable (0)	Problematic (1)	Satisfactory(2)	Good (3)
Theories and Concepts	Inappropriate Incorrect Incomplete	Relevancy Vague Major Inaccuracies Lacking Details	Relevancy Implied Minor Inaccuracies Details Too Broad	Relevancy Described No Inaccuracies Thorough Details
Applications & Evidence	Inappropriate Incorrect Incomplete	Relevancy Vague Major Inaccuracies Lacking Details	Relevancy Implied Minor Inaccuracies Details Too Broad	Relevancy Described No Inaccuracies Thorough Details

6. Grading or Evaluation tools other than Examinations:

i. **Human Capital Need Analysis (Infosys Case Analysis) / Conceptual Clarity Rubrics (10 Marks):**
Students will be given the Infosys case on HC Investment and asked to submit reports on the need and assessment of human capital at Infosys

ii. Responsibility Accounting Role Play:
Students will be given a situation in which responsibility accounting has to be demonstrated in teams through various roles.

7. Course policies

Please refer student guidelines.

8. Assignment Schedule

Date / Session of Announcement	Assignment / Presentation	Due Date / Session
1st Session	Human Capital Need (Case) Analysis	6th Session
1st Session	Responsibility Accounting Role Play	18th Session

9. Course requirements

As this course is purely a technical subject of HR domain, students are advised to learn the basic HRM books for equipping themselves in order to understand the technical concepts and applications of the course.

Sign:

Name:
AOL Endorsement

Sign:	Sign:	Sign:
Name: **Area Chair**	Name: **Programme Chair**	Name: **Dean (Academics)**

EMPLOYEE COUNSELLING - EC403

Course instructor

Name	Sem, Programme & Batch	Email
Prof. Saji George	IV Semester MHRM	saji@rajagiri.edu

1. About Employee counselling Course

This course is designed to create an understanding about the process of employee counselling and identify various approaches to deal with human problems at workplace. It will focus on conceptual understanding make the learner easily tackle the problems arising out of work situation. The modern work places are complex with younger workforce and Gen Y workforce which requires a lot of such skills for managing human resource in an organization.

This course helps to understand the workplace problems and need for counselling provision there. Apart from the three traditional forces of psychodynamics, humanistic and cognitive-behavioural approaches, the present comes the fourth force in counselling; cross-cultural or multicultural counselling. The main focus here is on interface between counsellor, client and organisation. Course also introduces the conceptual and practical aspects and also familiarises the students with the operational side of the counselling function with the primary focus on handling the issues and problems at workplace

2. Course Learning Objectives mapped to Programme Learning Objectives (PLOs)

1. To develop basic skills among students to independently handle a wide range of employee counseling and performance counseling.
2. Acquire special knowledge, skill and competence of a counsellor in order to understand the problem of the other person in an organizational context. **(PLO 3 a)**
3. Equip students to cop up with life situations to reduce emotional stress, to engage in growth producing activity and have a meaningful interpersonal relations and make effective decisions.
4. Gain general understanding of employee counselling methods and applications in multinational contexts.
5. Develop effective decision making skills in counselling and workplace moral to facilitate collaboration and inclusion.
6. Understand the implications of work-life balance in contemporary organizations and ways HR managers can mitigate.

PLG 3: Our graduates will possess good interpersonal skills.

***PLO 3a: Our graduates will be able to conceptualise the fundamentals of human behaviour.**

3. Session Plan

	Session	Topic	Reading	Methodology
Module 1	1-2	Industry and its impact on the employee: approaches to deal with human problems of workplace, conceptual understanding and tackling problems arising out of work situation -	Handout & Course materials prepared	Lecture
	3-4	Problems on maladjustment, ill-health, occupational diseases, mental health disorders, relationship in work-setting indiscipline, chronic absenteeism, alcoholism, drug addiction, indebtedness, housing and family problems	R1- Chapter 2	Caselets and discussions
	4-5	Problems of specific groups such as the backward, the handicapped, the older, younger and women employees - sexual harassment at work place.	R2 Chapter 3	Lecture
Module 2	6-7	Concept, objectives and scope of occupational social work	Handout, R2 Chapter 3	Discussions
	8-9	Functions and tasks of social worker and Employee Assistance Programmes;	Handout & Course materials prepared	Chat with a Social Worker
	10-11	Initiating services including educational, recreational, family and community welfare within and outside the workplace,	Handout & Course materials prepared	Video cases
	12-13	Special community projects undertaken by the organization.	Handout & Course materials prepared	Learning from reports
Module 3	13-14	Employee Counselling - meaning, need and goals of counselling at workplace; ;	R1 chapter 1 R 2 Chapter 1	Lecture
	15-16	Emergency and growth of counselling services; approaches to counselling	R1 chapter 1 R 2 Chapter 1	Lecture
	17-18	Types of counselling - existing, facilitative, preventive and developmental, directive and non-directive.	R1 chapter 1	Lecture

			R 2 Chapter 1	
Module 4	19-20	Counselling process-beginning, developing and terminating a counselling relationship, and follow up;	R2 Chapter 3	Exercise
	21-21	Assessing client's problems, selecting counselling strategies and interventions; changing behaviour through counselling;	R2 Chapter 4	Role play
	22-23	Students Presentations		Presentations
	24- 25	Students Presentations		Presentations
	26-27	Counselor's attitude and skills of counselling; counselor - counselee relationship and counselling environment;	Reading material	Role play
	28-29	Special problems in counselling	Reading material	Caselets
Module 5	30-31	Application of counselling to organizational situations with a focus on performance -		Role play and Lecture
	32-33	Students Presentations	Book 3, handout	Presentations
	34-35	Counselling - post appraisal counselling and counselling for career advancement, counselling for retirement and VRS;	Handout & Course materials prepared	Lecture and discussions
	36	Role of HR executives in employee counselling and development of their counselling skills. Final Summing- up	Handout & Course materials prepared	Discussions and Lecture

4. References/Books

BOOKS FOR REFERENCES:

1. Di Kamp. "Workplace Counselling: Developing Skills in Managers." McGraw-Hill,1996
2. McNorton, D. "Counselling Fundamentals in the Workplace." 2004
3. G. Arulmani et al; "Career Counselling: A Hand Book", Tata McGraw-Hill, New Delhi, 2004
4. Corner L. S. and Hackney H. – The Professional Counsellor's Process Guide to Helping Englewood Cliffs, New Jersey, and Prentice Hall Inc.1987.
5. Moursund J. – The Process of Counselling and Therapy - 2nd Edn. Englewood Cliffs, New Jersey, Prentice Hall Inc, 1990.
6. Reddy, Michael – Counselling at Work – British Psychological Society and Methuen, London and New York, 1897.
7. Biestek– Case Work Relationship, 1957.

8. Klein, Josephine– Working with Groups, 1970.
9. Mukerji B. – Community Development in India, 1961.
10. Gazed George M. – Group Counselling - A Development Approach,1971.

5. Other References

1. Johnson Walter F. – Guidance and Counselling in Group, 1963.
2. Narayan Rao S. Counselling Psychology, 1981.
3. Carrol, Michael &Walton, Michael - Handbook of Counselling in Organizations, Sage Pub. New Delhi.
4. Blocher, Donald H - Development Counselling, Ronald Press, New York.
5. Carroll, Michael – Workplace Counselling, Sage Pub.London.

6. Grading Criteria

Evidence of Learning and Assessment
Evaluation Criteria: "Developed" and "Mastery" Levels

- Development of ideas and concepts that are *reflective and original*
- Demonstration of effective counselling skills in various employee counselling situations.
- *Active participation* in class room discussions

Please refer to pages 5-10 for various rubrics that will be used to assess *learning outcomes* in this course.

7. Grading Structure

	Marks	**PLO Assessed**
End Semester Examination (ESE)	60	
CAE-1	7.5	
CAE-2	7.5	**PLO 3 a**
Group Assignment 1	05	
Class participation	05	
Presentations	05	
Individual Assignment - Report on the counselling carried out	10	
Total	**100**	

8. Instructional Methodology

Group Assignment (5 marks)

It will be based on the American counselling association code of ethics and standards guidelines. There will be two group assignments. Each carrying equal weightage.

Class participation (5 Marks). The class participation in classroom discussions and overall performance in allotted group activities will be taken in to consideration.

Presentations (5 marks) –

Presentation topics will be uploaded in Moodle. Topics are related to module 2 and 3

Individual Assignment- Report on counselling (10 marks) Students shall conduct a counselling in a given format and prepare the report with challenges and difficulties in process involved.

9. Course policies

Please refer student guidelines

10. Prerequisites for the Course: Attitude to learn.

11. Course requirements

Students are required to come prepared for each session by reading the required material given in advance.

Disclaimer**: The instructor reserves the right to make changes to the course plan as necessary. Announcements communicated throughout the semester/trimester will override any statement made here or in any other hand-outs. It is the student's responsibility to be aware of these changes and announcements.**

Sign:

Name:
AOL Endorsement

Sign:	Sign:	Sign:
Name: **Area Chair**	Name: **Programme Chair**	Name: **Dean (Academics)**

HUMAN RESOURCE INFORMATION SYSTEMS - EC407

Course facilitator

Name	Sem, Programme & Batch	Email
Dr. Ajith Sundaram	IV Sem MHRM (2017-19)	ajith@rajagiri.edu

1. About HRIS Course

The course is to prepare students to participate in all phases of the HRIS life cycle, from requirements specification through ongoing administration. It also provides students with basic technical skills needed to use HRIS technology. It intends the students to help design HRIS structure for future human resource and labour relations needs. It also would make the students familiarize with available software systems for human resource management and labour relations.

2. Course Learning Objectives mapped to Programme Learning Objectives (PLOs)

iv. To understand human resource management practices in different countries
v. To appreciate the various HRIS differences in different corporate settings. (PLO 1 c)
vi. To explore the HRIS practices in multinational companies

***PLO 1c: Our graduates will be able to generate multiple alternatives while resolving a problem or issue.**

3. Session Plan

Session	Topic	Reading	Methodology
1 & 2	**Module I** Introduction to Human Resource Information Systems. Role played by HRIS in the operation of human resources management function. Management decision making for HR - Strategic advantage - challenge of Business	Reference 1 and 2. Chapter 1	Lecture and Discussion
3 & 4	Process Reengineering and globalization of HR function Business imperative for HR Transformation	Reference 1 and 2. Chapter 2&3	Lecture and Discussion
5 & 6	HR as a business partner - focus on real business value - formulation of success factors for allocation of priorities and resources	Reference 1 and 2. Chapter 3	Lecture and Discussion
7 & 8	**Module II** Application Software Development: Deriving technical design specifications - user involvement in development process	Reference 1 and 2. Chapter 4&5	Lecture and Discussion
9 & 10	identifying business needs - translation of business needs into functional requirements for HRIS - role of application systems software. review of HR software for operational & administrative roles of HR function.	Reference 1 and 2. Chapter 5	Lecture and Discussion
11 & 12	**Module III** Collaborative Systems: Use of intranet and extranets to support communication & collaboration	Reference 1 and 2. Chapter 7&8	Lecture and Discussion

13 & 14	specific enterprise collaboration system as tools for communication of ideas, sharing resources & co-operative work efforts associated with HR business processes and projects.	Reference 1 and 2. Chapter 9	Lecture and Discussion
15 & 16	Consultative Role: basic concepts and components of management information, decision support and executive information systems – application systems software for consultative role of HR.	Reference 3 and 4. Chapter 5	Lecture and Discussion
17 & 18	**Module IV** Application software for Strategic Role of HR: Fundamental concepts of strategic advantage through information technology	Reference 3 and 4. Chapter 5&6	Lecture and Discussion
19 & 20	Organizing of HRIS implementation/Managing Change - functional and process alignments - core competencies of HRIS team.	Reference 3 and 4. Chapter 7	Lecture & Discussion
21 & 22	**Module V** BPR of HR function: Process of work-flow analysis	Reference 3 and 4. Chapter 8	Lecture and Discussion
23 & 24	Assessing Business Value - Cost justification methodologies.	Reference 3 and 4. Chapter 9	Lecture & Discussion
25 onwards	Group and individual student presentations.		

4. Reference Books

1. Rampton Glenn, Turnbull Ian, and Doran J Allen: Human Resource Management Systems (2nd Edition)
2. Viescas John: Running Microsoft Access 2000.
3. Walker Alfred, Handbook of Human Resource Information Systems.
4. Snell Scott, Pedigo Patricia, and Kraweic George," Managing the Impact of Information Technology of Human Resource Management" In G. Ferris, et al. Handbook Of Human Resource Management.
5. "Introduction to Information Systems: Essentials for the Internet Worked Enterprise" By O'Brien James A 9th Edition Published By Irwin/McGraw Hill.
6. Human Resource Management Systems: Strategies, Tactics & Techniques. Ceriello Vincent R., Freeman Christine. Lexington Books, Lexington Massachusetts, 1991.
7. Personal Computer (PC) Projects for Human Resources Management. Third Edition, Beutell Nicholas J. West Publishing Company,New York, 1996.
8. Managing Human Resources, 2nd Ed.Gomez Luis R. – Mejia, Balkin David B. and Cardy Robert L. (Prentice Hall), 1998.
9. Cases and Experiential Exercises in Human Resource Management, 2nd Ed. Hilgert Raymond L. and B Ling Cyril C. (Prentice Hall) 1996.

5. Grading Structure

Component	Marks	PLOs assessed
End Semester Examination (ESE)	60	
CAE-1	7.5	
CAE-2	7.5	
Written assignment & Individual presentation	15	
Group presentation	10	
	100	

6. Grading or Evaluation tools other than Examinations

Written assignment & Individual presentation
Shall be discussed in the class

Group presentation
Shall be discussed in the class

7. Course policies
Please refer student guidelines.

8. Assignment Schedule

Date/Session	Assignment/presentation	Due date/session
Session 1	Presentation topics	
Session 1	Presentations : 3 groups	**Session 25,26**
Session 1	Presentations : 3 groups	Session 27,28
Session 1	Presentations : 1 group	Session 29
	Individual presentation – Session 25 onwards	

9. Course requirements
Students are required to come prepared for each session by reading the respective reference material given in this course plan.

Sign:

Name:
AOL Endorsement

Sign:	Sign:	Sign:
Name: **Area Chair**	Name: **Programme Chair**	Name: **Dean (Academics)**

BSW Third Semester

SW3CRT09 Working With Groups

Course Facilitator: Dr. Nycil Romis Thomas *Email: nycil@rajagiri.edu*

I. Duration of Course

No	Activity	Duration
1	Face to face contact hours	49
2	Group Activities & Exercises	10
3	Group Assignment	12
4	Assessment (CAE & ESE)	7
	Total	**78**
	Remedial Sessions/Peer Tutoring/Tutorials (need based & Optional)	**10**

II. Course Objectives

1. To understand groups as a means of social work practice.
2. To have clarity on the principles, values, objectives of social work.
3. To understand group work process and group development.
4. To develop group work practical knowledge and skills.

III. Learning Outcomes

Learning Outcomes completing this course, students will be able to:	**Graduate Attributes** Achieving this LO will contribute to the development of student's:
LO1: Demonstrate knowledge on why and how groups are important in social work practice; as well as values and principles of group work practice.	Conceptual Clarity
LO2: Identify the group processes and integrate learning with group experiences	Critical Thinking and Analytical Skills
LO3: Plan and implement social group work sessions within the classroom	Communication and Teamwork
LO4: Analyse and evaluate group work sessions and group worker roles individually and in groups	Critical Thinking and Analytical Skills

IV. Session wise Course Plan

This course requires lot of student centric learning processes, integrating classroom interactions into the learning process. The approach demands a high level of attendance, preparation and participation. The teaching methods include lectures, role plays, discussion, group activities and exercises etc.

Topics	Session No. & Dates	Methodology
Module I Introducing the course and course plan. Group –definition, characteristics	1 5/6/18	Lecture, discussion
Group types; Relevance of groups in development of individuals.	2 6/6/18	Lecture, discussion
Module 2 Stages of group development: forming, storming, norming, performing, adjourning	3, 4 6/6/18	Lecture, exercises
Group as a mutual aid system	5 7/6/18	Lecture, exercises
Group dynamics-communication, interaction, cohesion	6, 7 11/6/18, 12/6/18	Lecture, exercises
Group dynamics – group control, conflict, culture, climate	8, 11 13/6/18, 14/6/18	Lecture, exercises
Group Exercises	9, 10 13/6/18	
Group dynamics - group structure: member roles, status, leadership	12, 13 18/6/18, 19/6/18	Lecture, exercises
Tools for assessing member relationships - sociometry and sociogram	14, 17 20/6/18, 21/6/18	Lecture, exercises
Group Exercises	15, 16 20/6/18	
Social Group Work-definition, basic assumptions	18 25/6/18	Lecture
Review I	19 26/6/18	
Objectives of group work, importance of social group work , types of groups in group work	20, 23 27/6/18, 28/6/18	Lecture
Group Exercises	21, 22 27/6/18	
Historical development, Social group work as a method of social work practice	24, 25 28/6/18, 2/7/18	Lecture, discussion
Module 3 Principles of social group work	26, 29 4/7/18, 5/7/18	Lecture, discussion
Group Exercises	27, 28 4/7/18	
Models of social group work	30, 31 9/7/18, 10/7/18	Lecture, discussion

Ethics in social group work	32 11/7/18	Lecture, discussion
Group Exercises	33,34 11/7/18	
Review II	35 12/7/18	
Group Work Process – overview, planning phase - group purpose, structure -selection of members, composition, orientation; time-duration, frequency, length	36, 37 23/7/18, 24/7/18	Lecture, group exercises
GW process – beginning phase - intake, setting objectives, assessment and planning	38, 41, 42 25/7/18, 26/7/18, 30/7/18	Lecture, group exercises
Group Assignment – Session 1	39, 40 25/7/18	
GW process – middle phase - intervention	43, 44, 47 31/7/18, 1/8/18, 2/8/18	Lecture, group exercises
Group Assignment – Session 2	45, 46 1/8/18	
GW process – evaluation and termination	48, 49 6/8/18, 7/8/18	Lecture, group exercises
Skills of a group worker	50, 53 8/8/18, 9/8/18	Lecture, discussion
Group Assignment – Session 3	51, 52 8/8/18	
Role of worker in social group work	54 13/8/18	Lecture, discussion
Module 4 Recording-Principles, types, purpose, contents, relevance. Group work record format.	55, 56 14/8/18, 16/8/18	Lecture, exercises
Group work approaches related to setting-groups in mental and physical health settings	57 29/8/18	Lecture, case discussions
Group Assignment – Session 4	58, 59 29/8/18	
Review III	60 30/8/18	
Involuntary groups, group work for substance abuse	61 3/9/18	Lecture, case discussions
Group work with children and families, GW with elderly	62, 63 4/9/18, 5/9/18	Lecture, case discussions
Group Assignment – Session 5	64, 65 5/9/18	
Group work with working groups	66 6/9/18	Lecture, case discussions

Module 5 Research and evaluation in group work Process evaluation, outcome evaluation	67, 68 10/9/18, 11/9/18	Lecture, group exercises
Review IV & V	69 12/9/18	
Evaluation in groups	70, 71 12/9/18	

V. Course Assessment

Assignments

Topics	Submission		Deadlines
Influence of groups in individual life (add your own reflection on influence of any two groups in your life)	Individual	Handwritten	**28th June 2018**
Reflective Journal on working with groups, in the prescribed format	Group report with individual reflections	Handwritten/typed	**13th September 2018**

Mark distribution for Attendance

90-100%	5
85-89 %	4
80-84 %	3
76-79 %	2
75	1
<75	**Not eligible for appearing for ESE**

Course Evaluation Scheme

Component	Marks
End Semester Examination	80
Continuous Internal Assessment (CIA)	
CAE 1 (Module 1 & 2)	5
CAE 2 (Module 3& 4)	5
Assignments	5
Attendance	5
Total	100

VI. Required Reading:

References

1. **Shulman, Lawrence (1999). The Skills of Helping Individuals, Groups and Families. F E Peacock**
2. Toseland, Ronald W., Rivas, Robert F. (2009). An introduction to group work practice (4th Ed.) Boston: Pearson/Allyn and Bacon.
3. Garvin, Charles D.et. all (2004). Handbook of social work with groups. New Delhi: Rawat Publications.
4. Hartford, Margaret E (1971). Groups in Social Work Application of Small Group Theory And Research To Social Work Practice Columbia University Press., New York
5. Wilson, Gertrude, & Ryland, Gladys, Social Group Work Practice
6. Zastrow, Charles H. (2001). Social Work with groups: A comprehensive workbook (7th Ed.) Brooks/Cole
7. Misra, P.D. &Misra B. (2004). Social Work Profession in India. Lucknow: New royal book Co.

BANKING AND INSURANCE 2018-21

Course instructors		
Name	**Sem, Programme & Batch**	**Email**
Mahesh K.M	**Ist Sem B.com CA**	**maheshkm@rajagiri.edu**

1. **B.COM Mission Statement:**

Our mission is to identify youngsters with a positive attitude and to develop them as professionals in the field of commerce, business and industry both at the National and International levels.

2. **B.COM Programme Learning Outcomes :**

1) To develop competency in understanding the practical and theoretical aspects of different concepts -**Conceptual Clarity**
2) The ability to communicate ideas and express themselves clearly and effectively in business situations – **Communication Skill**
3) To develop competency in analytical and critical thinking this would help in evaluating problems and to take sound business decisions. – **Problem Solving Skill**
4) The ability to identify and evaluate issues pertaining to business situations and make informed decisions - **Decision Making**

5) The ability to participate collaboratively and effectively in teams to achieve the desired business objectives- **Ability to Work individually & in Team**

3. **B.Com Course learning objectives aligned with programme outcomes:**
Information technology for business course learning objectives is aligned with B.com programme learning outcomes.

i. To familiarize the students with the basic concepts and practice of banking and the principles of Insurance **(1)**

ii. To familiarize the students with the innovative practices followed in the banking sector **(2)**

iii. To enable the students to understand the relationship between banker and customer **(1)**

iv. To make the students explore with the fundamental principles of insurance **(2)**

v. To impart knowledge on practice of insurance business. **(2)**

About Banking and Insurance Course

The objective of this course is to familiarize the students with the basic concepts and practice of banking and the principles of Insurance. It will help the student t gain an in-depth knowledge about innovations in banking and insurance sector in India

4. **Course design and its relationship to course learning objectives**

This course has five modules. Each module has specific learning objectives, mentioned in the previous section. The learning objectives focused is given in parentheses. Bold and underlined numbers indicate the module's primary learning objectives; others are secondary.

Module 1. Introduction to Banking

This module focuses on Origin and Evolution of Banks, Meaning and Definition and different Classification of Banks – Functions of Commercial Banks.(i, **ii**)

Module 2. Innovations and Reforms in Banking

This module provide insight knowledge about various innovative practices used in banking sector such as E-banking, ATM ,CDM - telephone/ Mobile Banking, ECS, EFT , NEFT , RTGS, SWIFT , CORE Banking etc..(i,**ii**)

Module 3. Banker and Customer.

This module focuses on the relationship between banker and customer such as general and special relationship (i,**iii**)

Module 4. Insurance

This module provides insight knowledge about Insurance sector in India and various practices and principles followed by the insurance companies (i,i**v**)

Module 5. Types of insurance

This module enables the students to get in-depth knowledge about different types on insurance policies. (i,**v**)

5. **References/Books**

1. Shekhar, K.C, Banking Theory and Practice, Vikas Publishing House, New Delhi
2. Maheswari, S.N., Banking Law and Practice, Kalyani Publishers, New Delhi
3. Sundharam,Varshney, Banking Theory Law & Practice, Sulthan Chand & Sons, New Delhi.
4. Agarwal, O.P., Banking and Insurance, Himalya Publishing House, Mumbai
5. Saxena, G.S., Legal Aspects of Banking Operations, Sultan Chand and Sons, New Delhi
6. Agarwal, O.P., Banking and Insurance, Himalya Publishing House, Mumbai
7. Tripati, Nalini & Prabil Pal., Insurance: Theory and Practice, PHI Pvt Ltd, New Delhi
8. Gupta, P.K., Insurance and Risk Management, Himalaya Publishing House, Mumbai
9. Mishra, M.N., Principles and Practices of Insurance, S. Chand and Sons, New Delhi
10. Banking and Insurance, Ajimon George, Pratibha Publications (A&G)

6. **Grading Structure**

End Semester Examination (ESE)(T)	80 marks
CAE-1	5 marks
CAE-2	5 marks
Attendance	5 marks
Written assignment	2.5 marks
Group based assignment	2.5mark
Total	**100**

7. Instructional Methodology

i. **Written assignment (1 mark)**

Written assignment will be to analyse the innovations in banking sector after the completion of module 2, students need to link the module to the assignment and submit in hard copy.

ii. **Group based assignment(1 mark)**

Group based assignment include classification of life insurance policies. Topics are linked to the module 5 and are submitted in hard copy after the completion of module 5.

8. Course policies

Please refer student guidelines

9. Session Plan

Session	Topic/Assignment	Reading	Methodology
1 – 5	**Module I** **Introduction to** Origin and Evolution of Banks - Meaning and Definition-Classification of Banks – Functions of Commercial Banks	Banking and Insurance- A&G Module-1	Lecture/Brain storming session
6- 10	Primary and Secondary- Credit Creation-Reserve Bank of India-Functions of RBI-Banking Ombudsman Scheme.	Banking and Insurance- A&G Module-1	Lecture/Brain storming session
11-16	**Module II Innovations and Reforms in Banking:** E-banking – ATM – CDM - telephone/ Mobile Banking –ECS– EFT – NEFT – RTGS – SWIFT - CORE Banking - Cheque Truncation System - Credit and Debit Cards – CIBIL – KYC - Banking Sector Reforms-	Banking and Insurance- A&G Module-2	Lecture/Brain storming session
27-22	Prudential Norms- Capital Adequacy Norms - NPA – NBA -Basel norms - Small Finance Banks - Payment Banks - Financial Inclusion - PMJDY.	Banking and Insurance- A&G Module-2	Lecture/Brain storming session
23-26	**Module III** **Banker and Customer** Meaning and Definition- Relationship- General and Special- Different Types of Accounts-	Banking and Insurance- A&G Module-3	Lecture/Brain storming session
27-32	Cheque- dishonor of cheque – payment in due course – Crossing - Endorsement.	Banking and Insurance- A&G Module-3	Lecture/Brain storming session
33-35	**Module IV Insurance:** Introduction- Concept of Risk- Insurance - Need and Importance - Principles of Insurance contract.	Banking and Insurance- A&G Module-4	Lecture/Brain storming session
36-40	Insurance Industry in India- IRDA - Insurance Sector Reforms – Banc assurance	Banking and Insurance- A&G Module-4	Lecture/ Practical lab
41-46	**Module V Types of insurance** Life Insurance– Features - Classification of Policies - Policy Conditions -Application and Acceptance- Assignments - Nomination - -Surrender-	Banking and Insurance- A&G Module-5	Lecture/Brain storming session

	Foreclosure- Marine Insurance		
47-52	Features- Policy Conditions - Clauses - Fire Insurance- Motor vehicle insurance - Health Insurance- Burglary insurance-personal accident insurance- Re-Insurance- Group insurance.	Banking and Insurance- A&G Module-5	Lecture/Brain storming session

11. Assignment Schedule

Date	Assignment/presentation	Due date
7/07/2018	Written assignment	18/07/2018
12/08/2017	Task based assignment	28/8/2018

12. Course requirements

Students are required to come prepared for each session by reading the respective reference material given in this course plan. Record book is compulsory

13. Attendance

75% attendance is mandatory for eligibility to attend the End semester examination (ESE).

FINANCIAL ACCOUNTING

Course instructors

Name	Sem, Programme& Batch	Email
Titus PTC	I Sem B.com Model I FT	titusptc@gmail.com
Mary Smitha	I Sem B.Com Model I CA	smithajesudas@gmail.com

1. **About Financial Accounting**

   Financial Accounting deals with the preparation and maintenance of books of account of different entities which include sole proprietorship concern, Branch establishments and the ascertainment of profit or loss of such entities which maintain accounts according to double entry system as well as which do not keep a complete set of books of account. Financial Accounting also helps in recording transactions relating to Royalty and Consignment

2. **B.Com Course learning objectives aligned with programme outcomes:**

   Financial Accounting course learning objectives are aligned with B.com programme learning outcomes.

   i. To understand the basic principles of Accounting
   ii. To enable the preparation of books of accounts.
   iii. To help in ascertainment of profit and financial position of sole proprietorship concerns.
   iv. To enable the preparation of accounts from incomplete records.
   v. To know about the Royalty agreement and maintenance of accounts relating to Royalty.
   vi. To understand the maintenance of accounts by Head Office and its Branches.
   vii. To know about the consignment transactions and preparation of accounts relating to consignment.

   PLO 2a: Our graduates will be proficient in oral communication.

   PLO 2b: Our graduates will be able to draft official letters or other documents that are required for an HR functionary.

3. **Session Plan**

Session	Topic / Assignment	Reading	Methodology
1 – 10	**Module I: Final Accounts of Sole traders** Final accounts of sole traders- principles of materiality- consistency- prudence- timeliness- substance over form- matching principle- accounting standards- meaning and scope- capital and revenue expenditure- capital and revenue receipts- adjusting- closing and	KGJJ,JN	Lecture/Case study

	rectification entries.		
10 - 20	Trial balance- trading and profit and loss account- Balance Sheet- preparation with all adjustment including over cast and under cast of both opening and closing stock- An overview on AS -1,2,4,5,6 and 10.	KGJJ,JN	Lecture/Case study
21 - 23	**Module II: Accounts of Incomplete Records** Accounts for incomplete records- features of single entry- distinguish single entry and double entry- defects of double entry.	KGJJ,JN	Lecture/Case study
23 - 30	Profit determination under single entry- Capital Comparison method, Conversion method- Steps for the conversion of single entry into double entry.	KGJJ,JN	Lecture/Case study
30 - 40	Preparation of trading and profit and loss account under conversion method.	KGJJ,JN	Lecture/Case study
41 - 50	**Module III: Royalty Accounts** Royalty accounts-meaning, minimum rent-short working- recovery- special circumstances-adjustment of minimum rent in the event of strike and lockouts- government subsidy in case of strike or lockouts.	KGJJ,JN	Lecture/Case study
50 - 55	Journal entries in the books of lessor and lessee-preparation of minimum rent- short working-royalty accounts (excluding sublease)	KGJJ,JN	Lecture/Case study
56 - 68	**Module IV: Consignment** Accounting for consignment-meaning-important terms- journal entries in the books of consignor and consignee- goods send at cost price or invoice price.	KGJJ,JN	Lecture/Case study
68 - 78	Preparation of consignment account-consignees account-Valuation of stock-Normal loss and abnormal loss.	KGJJ,JN	Lecture/Case study
79 - 82	**Module V: Farm Accounting** Farm Accounts-meaning-characteristics-objectives and advantages- Recording of farm transactions.	KGJJ,JN	Lecture/Case study
82 - 90	Preparation of farm account, crop account, dairy account, livestock account etc- preparation of final accounts of farming activities.	KGJJ,JN	Lecture/Case study

4. **References/Books**

- Dr. K.G.C. Nair , Dr. Jyan and Dr. Jacob Thomas(KGJJ) : Financial Accounting
- Jain S.P. and Narang K.L.(JN) : Advanced Accounting

- Maheshwari S.N. AND Maheshwari S.K.(MM) : Advanced Accounting
- Paul K.R. : Corporate Accounting
- Dr. S.M. Shukla and Dr. S.P. Gupta(SHG) Advanced Accounting
- Mc Shukla and T.S. Grewal (McG) : Advanced Accounts
- Rawat D.S. : Accounting
- Nirmal Gupta and Chhavi Sharma(NC): Corporate Accounting Theory and Practice

5. Grading Structure

End Semester Examination (ESE)	80marks
CAE-1	5 marks
CAE-2	5 marks
Attendance	5 marks
Written assignment (Conceptual Clarity)	2.5 marks
Task based assignment (Problem Solving Skills)	2.5 mark
Total	**100**

6. Instructional Methodology

i. **Written assignment (2.5mark)**
Written assignment on adjustment entries, transfer entries and closing entries at the time of finalisation of accounts.

ii. **Problem based assignment(2.5 mark)**
Problem based assignment analyses the problem solving skill of the students by giving various problems regarding the preparation of Royalty Accounts.

7. Course policies

Please refer student guidelines

8. Assignment/presentation…. Schedule

Date	Assignment/presentation	Due date
23/06/2018	Written Assignment	30/06/2018
26/08/2018	Task based assignment	15/09/2018

9. Course requirements

Students are required to come prepared for each session by reading the respective reference material given in this course plan. Do bring calculator in all classes.

Core Course -1: DIMENSIONS AND METHODOLOGY OF BUSINESS STUDIES

Course instructors

Name	Sem, Programme & Batch	Email
Fr.Rintle Mathew	I Sem B.com CA	rintlemathew@rajagiri.edu
Neethu varghese		neethuvarghese@rajagiri.edu
Jose Pious		josepious@rajagiri.edu
Riya Mary		Riyamary@rajagiri.edu

1. **B.COM Mission Statement:**

   Our mission is to identify youngsters with a positive attitude and to develop them as professionals in the field of commerce, business and industry both at the National and International levels.

2. **B.COM Programme Learning Outcomes :**

   1) To develop competency in understanding the practical and theoretical aspects of different concepts -**Conceptual Clarity**
   2) The ability to communicate ideas and express themselves clearly and effectively in business situations – **Communication Skill**
   3) To develop competency in analytical and critical thinking which would help in evaluating problems and to take sound business decisions. – **Problem Solving Skill**
   4) The ability to identify and evaluate issues pertaining to business situations and make informed decisions - **Decision Making**

   5) The ability to participate collaboratively and effectively in teams to achieve the desired business objectives- **Ability to Work individually & in Team**

3. **B.Com Course learning objectives aligned with programme outcomes:**
   Information technology for business course learning objectives is aligned with B.com programme learning outcomes.

   i. To understand business and its role in society **(1)**

   ii. To have an understanding of Business ethics and CSR **(2)**

   iii. To comprehend the business environment and various dimensions **(2)**

   iv. To familiarise Technology integration in business **(5)**

   v. To introduce the importance and fundamentals of business research **(1)**

About Dimensions and Methodology of Business Studies Course

Dimensions and Methodology of Business Studies Is an interesting and creative subject. It gives the students an overview role of various dimensions in business.

4. **Course design and its relationship to course learning objectives**
   This course has five modules. Each module has specific learning objectives, mentioned in the previous section. The learning objectives focused is given in parentheses. Bold and underlined numbers indicate the module's primary learning objectives; others are secondary.

Module 1. Business and Environment
This module introduces the importance concepts like business, objectives, stakeholders etc.(i)

Module 2. Business in India
This module deals with the functioning of business in India, background of LPG.(i,iii)

Module 3. Technology integration in business
This module focuses on E commerce models in India (i,ii)

Module 4. Business Ethics
This module provides insight knowledge about various concepts of ethics in business.(i,v)

Module 5. Business Research
This module is about various concepts of research. (i,vi)

5. **References/Books**

1. Keith Davis and William C.Frederick: Business and Society Management, Public Policy, Ethics.
2. Peter F. Drucker: Management Tasks, Responsibilities, Practices.
3. Peter F Drucker: The Practice of Management.
4. P.T.Joseph, S.J, E-Commerce: An Indian Perspective, Prentice Hall of India
5. Kamalesh K Bajaj and Debjani Nag: E-Commerce, the Cutting Edge of Business:, Tata McGraw Hill.
6. Schneider: E-Commerce: Thomson Publication
7. CSV Murthy, Business Ethics, Himalaya Publishing House, Mumbai
8. C R Kothari Research Methodology, New Age Publishers
9. O R Krishnaswamy: Research Methodology- Himalaya Publications
10. N V Badi and R.V. Badi: Business Ethics: Vrinda Publications
11. Cherunilam, Fransis, Business environment, Himalaya Publishing House, Mumbai.
12. Fernando, A, C,. Business Environment, Pearson, New Delhi
13 Francis, Ronald & Mishra, Muktha, Business Ethics: An Indian Perspective, Tata McGraw Hill
Pvt Ltd, New Delhi
14 Sharma, J.P., Corporate Governance, Business Ethics, and CSR, Ane Books Pvt Ltd, New Delhi.
15. Ghosh, B.N., Business Ethics and Corporate Governance, Tata McGraw Hill Pvt Ltd, Delhi

6. **Grading Structure**

End Semester Examination (ESE)	80 marks
CAE-1	5marks
CAE-2	5 marks
Attendance	5 marks
Written assignment	2.5marks
Task based assignment	2.5mark
Total	**100**

7. **Instructional Methodology**

i. **Written assignment (2.5mark)**
Written assignment will be to analyse the business environment in India

ii. **Group based assignment(2.5mark)**
Group based assignment include a case study on business ethics.

8. **Course policies**
Please refer student guidelines

9. **Session Plan**

Session	Topic/Assignment	Reading	Methodology
1 – 3	**Module I** Business- Functions - Scope - Significance of business - Objectives of business - Business and development - Forms of business organisations	KDWC,CRK	Lecture/Brainstorming session
3- 8	Stake holders of businessBusiness Environment – Definition - Features- Importance	CSVM	Lecture/Brainstorming session
8-10	Components of business environmentInternal environment and external environment - Micro environment and macro environment- Global business environment	GBN,FRMM	Lecture/Brainstorming session
10-16	**Module 2** Stages and developments of business in the Indian economy since independence - Role of public, private, co-operative sectors	CRK,SJP	Lecture/Brainstorming session
17-20	Liberalisation, Privatisation and Globalization – Disinvestment – Outsourcing –Recent economic initiatives - Niti Ayog - Make in India initiative	SJP,STP	Lecture/Brainstorming session
21-25	**Module 3** E Commerce- Meaning- Functions - Operation of E-commerce - Types of E-Commerce -B2C-B2B-C2C-C2B- B2E- B2G- P2P-	STP	Lecture/Brainstorming session
26-28	E-Commerce and E-Business – M-Commerce- Meaning- Advantages- Challenges	CRK,STP	Lecture/Brainstorming session
29-34	E-Payment systems (brief study) Debit/Credit card payment, Net banking, Digital wallet, e-cheque, e-cash – Payment gateway.	CSVM,STP	Lecture/Brainstorming session
35-38	**Module 4** Importance - Principles of business ethics - Factors influencing Business Ethics - Arguments in favour and against business ethics - Social responsibility of business – objectives and principles - Arguments in favour and against social responsibility.	FRMM,SJP	Lecture
38-44	Corporate Governance – Meaning and importance – Objectives – Principles	CRK	Lecture
45-50	**Module 5** Research- Meaning and Definition- Importance of research- Quantitative and qualitative approach to	FRMM,KDWC	Lecture

	research-Inductive and deductive reasoning- Major Types of Research (PureApplied - Exploratory- Descriptive- Empirical- Analytical)		
51-54	Business Research- Elements of Business Research- Management Research- -Objectives- Research Methods vs Research Methodology -Research Process(brief outline only) –Research report	CRK	Lecture

11. Assignment Schedule

Date	Assignment/presentation	Due date
17/06/2018	Written assignment	23/06/2018
27/08/2018	Group based assignment	5/09/2018

12. Course requirements

Students are required to come prepared for each session by reading the respective reference material given in this course plan. Record book is compulsory

13. Attendance

75% attendance is mandatory for eligibility to attend the End semester examination (ESE).

BUSINESS REGULATORY FRAMEWORK

Course Facilitator	Sem, Programme & Batch	Email
Varghese Joy	II Sem B.Com Model II A Batch	varghesejoy@rajagiri.edu

1. **B.Com Mission Statement**

   Our mission is to identify youngsters with a positive attitude and to develop them as professionals in the field of commerce, business and industry both at the National and International levels.

2. **B.Com Programme Learning Outcomes:**
   1. To develop competency in understanding the practical and theoretical aspects of different concepts - **Conceptual Clarity**
   2. The ability to communicate ideas and express themselves clearly and effectively in business situations – **Communication Skill**
   3. To develop competency in analytical and critical thinking which would help in evaluating problems and to take sound business decisions. – **Problem Solving Skill**
   4. The ability to identify and evaluate issues pertaining to business situations and make informed decisions. - **Decision Making**
   5. The ability to participate collaboratively and effectively in teams to achieve the desired business objectives. - **Ability to Work Individually & in Team**

3. **Course Learning objectives aligned with programme outcomes**

Business Regulatory Framework course learning objectives are aligned with B.Com programme learning outcomes. Numbers in parenthesis denote B.Com LO.

i. To impart awareness about the basic principles of business contracts **(1)**.
ii. To differentiate a valid contract from mere agreements **(4)**.
iii. To understand the various provisions of Indian Contract Act, 1872 **(1)**.
iv. To provide basic understanding on various types of special contracts **(1)**.
v. To understand various rights and duties of bailor and bailee & pawnor and pawnee **(4)**.
vi. To introduce concepts of Contract of Agency and various rules regarding Indian Contract Act 1872 **(1)**.
vii. To introduce various provisions of Sale of Goods Act, 1930 **(4)**.

4. **About Business Regulatory Framework Course**

This course explains various principles of business contract. On the completion of this course students will be in a position to differentiate a valid contract from mere agreements. Apart from basic principles of Contract Act, various legal provisions regarding some special contracts and Sale of Goods Act, 1930 are also discussed.

5. **Course design and its relationship to course learning objectives**

This course has five modules. Each module has specific learning objectives, mentioned in the previous section. The learning objectives focused is given in parentheses. Bold and underlined numbers indicate the module's primary learning objectives; others are secondary.

Module 1: Introduction to Mercantile Law

The current business world requires the execution of large number of contracts between different stakeholders. This module explains the concept of contract and the essential elements required of valid contracts. It also covers the provisions regarding capacity of the parties and consent between the parties in the Act. This module also focuses conceptual clarity on legality of object, consideration and breach of contract. (i, ii, iii)

Module 2: Special Contract I

Rights and duties of bailor and bailee and pawnor and pawnee is discussed in detail in this module. (v, vi)

Module 3: Special Contract II

In this module, rights of indemnity holder, different types of guarantees, rights and liabilities of sureties are discussed. (iv)

Module 4: Law of Agency

The main focal point of this module is to provide a basic understanding on Contract of Agency. Apart from covering basic concepts of Contract of Agency, different classification of agents, rights and duties of various parties involved in this contract is also explained in detail. (iv, vi)

Module 5: Sale of Goods Act, 1930

The main focus of this module is to understand the basic concepts and rules included in Sale of Goods Act, 1930. Various kinds of goods, conditions and warranties are discussed in this module. Students will be introduced to the concepts like Caveat Emptor, Sale by Non owners and unpaid seller. (iv, vii)

6. References/Books

- Kapoor. N.D (KND) : Business Law
- Chandha.P.R : Business Law
- Garg and Chawla (GC): Fundamentals of Business Laws
- Tulsian.P.C (TPC): Business Laws
- B.S.Moshal (BSM): Modern Business Law
- K. C. Garg, V. K. Sareen (KCVK): Business Laws
- Biju P. Mani (BPM): Business Regulatory Framework

7. Grading Structure:

End Semester Examination (ESE)	80 marks
CAE-1	5marks
CAE-2	5 marks
Attendance	5 marks
Written Assignment	2.5 marks
Task Based Assignment	2.5 marks
Total	**100**

8. **Instructional Methodology**

Written Assignment (2.5 marks)

This assignment analyses the essentials needed to have legal validity for the contracts in India. Students will be directed to give explanation for the reasons why all agreements are not considered as contracts in India. Proper references should be cited.

Group Based Assignment (2.5 marks)

In this assignment students are divided into 6-7 member groups. Each group will be asked to present a role play, which is related to any case law, which is relevant to this syllabus. Proper script shall be prepared in advance and submitted to the course facilitator in writing. Medium of presentation should be only in English.

9. **Course policies**

Please refer student guidelines.

10. **Session Plan**

Session	Topic	Reading	Methodology
1- 2	Bridge Class on Indian Legal System and Law & Mercantile Law		Lecture
3- 8	**Module I** Introduction to Mercantile Law: Law of Contract - Definition - Kinds of Contracts	KND, KCVK	Lecture and Brainstorming
9-18	Valid – Void - Voidable - Contingent and Quasi Contract - E-Contract - Essentials of a Valid Contract - Offer and Acceptance - Communication of Offer - Acceptance and its Revocation	KND, BPM	Lecture & Case Study
19 - 26	Agreement - Consideration - Capacity to Contract - Free Consent - Legality of Object and Consideration - Performance of Contract -Discharge of Contract -Breach of Contract - Remedies for Breach of Contract.	KND, BPM	Lecture
26-35	**Module II** Special Contract I: Bailor and Bailee - Finder of Lost Goods - Pledge - Essentials - Rights and Duties of Pawner and Pawnee	BPM	Lecture
36-42	**Module III** Special Contract II: Indemnity and Guarantee- Indemnity - Meaning and Definition - Contract of Guarantee	KCVK, KND	Lecture & Case Study
43-47	Kinds of Guarantee - Rights and Liabilities of Surety - Discharge of Surety.	BPM, KCVK	Lecture
48-61	**Module IV** Law of Agency: Essentials, kinds of agents, rights and duties of agent and principal, creation of agency, termination of agency-Sub agents and substituted agents- Relationship	BPM, KND	Lecture
62-68	**Module V** Sale of Goods Act, 1930: Essentials of Contract of Sale Goods - Classification of	BPM, KCVK	Lecture

	Goods - Condition and Warranties		
69-72	Transfer of Property in Goods - Right of Unpaid Seller - Buyer's Right Against Seller -Auction Sale.	KCVK, KND	Lecture & Brainstorming

11. Assignment Schedule

Date	Assignment/presentation	Due date
December 3, 2018	Written Assignment	Submission before CAE 1
February 01, 2019	Group Based Assignment	Submission before CAE 2

12. Course requirements

Students are required to come prepared for each session by reading the respective reference material given in this course plan.

Attendance

75% attendance is mandatory for eligibility to attend the End semester examination (ESE).