



DAYANANDA SAGAR UNIVERSITY

PHD COURSE WORK SYLLABUS

(WITH EFFECT FROM JANUARY 2024 ONWARDS)

MANDATORY SUBJECTS	
S.NO.	COURSE CODE – COMMON PAPERS
1	1A. 24PHRM701 RESEARCH METHODOLOGY -I.DOCX
2	1B. 24PHRM702 - RESEARCH METHODOLOGY AND APPLIED STATISTICS (ONLY FOR NURSING SCIENCES).DOCX
3	24PHPE01 RESEARCH AND PUBLICATION ETHICS (RPE).DOCX

BACKGROUND COURSEWORK	
S.NO	COURSE CODE - COURSE NAME AND LINK
1	<u>24BAS001 RECENT ADVANCES IN BIOLOGICAL TECHNIQUES.DOCX</u>
2	<u>24BAS002 BASICS OF CANCER BIOLOGY.DOCX</u>
3	<u>24BAS003 AI AND ML IN DRUG DISCOVERY.DOCX</u>
4	<u>24BAS004 GENOMICS AND PHARMACOLOGY IN DRUG DISCOVERY.DOCX</u>
5	<u>24BAS005 ANTIMICROBIAL RESISTANCE.DOCX</u>
6	<u>24BAS006 MICROBIAL METABOLITES AND ANTIMICROBIAL PEPTIDES.DOCX</u>
7	<u>24BAS007 BASIC MICROBIOLOGY.DOCX</u>
8	<u>24BAS008 INDUSTRIAL MICROBIOLOGY.DOCX</u>
9	<u>24BAS009 IMMUNOLOGY.DOCX</u>
10	<u>24BAS010 BIOSTATISTICS AND BIOINFORMATICS.DOCX</u>
11	<u>24CHE001 MATERIALS SCIENCE.DOCX</u>
12	<u>24CHE002 NANOMATERIALS SYNTHESIS AND CHARACTERIZATION TECHNIQUES.DOCX</u>
13	<u>24CHE003 MATERIALS CHARACTERIZATION.DOCX</u>
14	<u>24CHE004 BASICS CONCEPTS OF ANALYTICAL CHEMISTRY.DOCX</u>
15	<u>24CHE005 TARGETED DRUG DELIVERY SYSTEM.DOCX</u>
16	<u>24CHE006 ANALYTICAL TECHNIQUES.DOCX</u>
17	<u>24CHE007 CRYSTAL ENGINEERING.DOCX</u>
18	<u>24CHE008 COMPUTATIONAL NANOSCIENCE.DOCX</u>

19	<u>24CJMC001 COMMUNICATION FOR SOCIAL CHANGE.DOC</u>
20	<u>24CJMC002 DIGITAL MEDIA MARKETING.DOC</u>
21	<u>24CJMC003 MODERN MANAGEMENT APPROACHES.DOC</u>
22	<u>24CJMC004 WRITING AND RESEARCH SKILLS FOR THE 21ST C LITERATURE.DOCX</u>
23	<u>24CJMC005 POLITICAL COMMUNICATION.DOC</u>
24	<u>24CJMC006 MEDIA PSYCHOLOGY.DOC</u>
25	<u>24CJMC007 PUBLIC RELATIONS AND CORPORATE COMMUNICATIONS.DOC</u>
26	<u>24CJMC008 SPECULATIVE FICTION.DOCX</u>
27	<u>24CMS001 ADVANCES IN AGRICULTURAL MARKETING.DOCX</u>
28	<u>24CMS002 AGRICULTURAL ECONOMY AND POLICY FRAMEWORK.DOCX</u>
29	<u>24CMS003 BANKING PRACTICES AND REGULATION.DOCX</u>
30	<u>24CMS004 BASICS OF ECONOMETRICS.DOCX</u>
31	<u>24CMS005 BEHAVIOURAL FINANCE.DOCX</u>
32	<u>24CMS006 ECOMMERCE.DOCX</u>
33	<u>24CMS007 HUMAN RESOURCE MANAGEMENT.DOCX</u>
34	<u>24CMS008 DIGITAL MARKETING.DOCX</u>
35	<u>24CMS009 MERGERS, ACQUISITIONS & CORPORATE RESTRUCTURING.DOCX</u>
36	<u>24CMS010 INTERNATIONAL HUMAN RESOURCE MANAGEMENT.DOCX</u>
37	<u>24CMS011 MARKETING MANAGEMENT.DOCX</u>

38	<u>24CMS012 MICROFINANCE AND FINANCIAL INCLUSION.DOCX</u>
39	<u>24CMS013 ORGANIZATIONAL BEHAVIOUR.DOCX</u>
40	<u>24CMS014 PERFORMANCE MANAGEMENT.DOCX</u>
41	<u>24CMS015 SERVICES MARKETING.DOCX</u>
42	<u>24CMS016 STRATEGIC HUMAN RESOURCE MANAGEMENT.DOCX</u>
43	<u>24CMS017 SUPPLY CHAIN MANAGEMENT.DOCX</u>
44	<u>24CMS018 WOMEN ENTREPRENEURSHIP AND GENDER STUDIES.DOCX</u>
45	<u>24ECE001 MEDICAL IMAGE PROCESSING AND ITS ALGORITHMS.DOCX</u>
46	<u>24ECE002 ADVANCED PRINCIPLES OF DEEP LEARNING.DOCX</u>
47	<u>24ECE003 POWER ELECTRONICS DEVICES.DOCX</u>
48	<u>24ECE004 ELECTRIC VEHICLE TECHNOLOGY.DOCX</u>
49	<u>24ECE005 FUNDAMENTALS OF DATA SCIENCE.DOCX</u>
50	<u>24ECE006 ALGORITHMS IN COMPUTATIONAL BIOLOGY.DOCX</u>
51	<u>24ECE007 SYSTEM DESIGN USING VERILOG.DOCX</u>
52	<u>24ECE008 INTRODUCTION TO MACHINE LEARNING.DOCX</u>
53	<u>24ECE009 SOFT COMPUTING.DOCX</u>
54	<u>24ECE010 WIRELESS SENSOR NETWORKS & IOT.DOCX</u>
55	<u>24ECE011 MICRO ELECTRO MECHANICAL SYSTEMS (MEMS).DOCX</u>

56	<u>24ECE012 ADVANCED OPTICAL COMMUNICATION SYSTEMS.DOCX</u>
57	<u>24ECE013 ADVANCED ANTENNA THEORY.DOCX</u>
58	<u>24ECE014 MATHEMATICAL MODELLING.DOCX</u>
59	<u>24ECE015 ADVANCED INTERNET OF THINGS.DOCX</u>
60	<u>24ECE016 APPLIED MATHEMATICAL MODELLING.DOCX</u>
61	<u>24ECE017 POLYMER JOINING MECHANISM.DOCX</u>
62	<u>24ECE018 INTERDISCIPLINARY ASPECTS IN MANUFACTURING.DOCX</u>
63	<u>24ECE021 POWER ELECTRONICS.DOCX</u>
64	<u>24ECE022 MULTILEVEL INVERTERS.DOCX</u>
65	<u>24ECE023 FUNDAMENTAL OF MEDICAL IMAGING.DOCX</u>
66	<u>24ENGCS002 BLOCKCHAIN TECHNOLOGY.DOCX</u>
67	<u>24ENGCS003 CLOUD COMPUTING.DOCX</u>
68	<u>24ENGCS004 CLOUD SECURITY.DOCX</u>
69	<u>24ENGCS005 CRYPTOGRAPHY AND NETWORK SECURITY.DOC</u>
70	<u>24ENGCS006 DATA MINING TECHNIQUES.DOCX</u>
71	<u>24ENGCS007 DATA SCIENCE.DOCX</u>
72	<u>24ENGCS008 DEEP LEARNING.DOCX</u>
73	<u>24ENGCS009 - DIGITAL IMAGE PROCESSING.DOCX</u>
74	<u>24ENGCS010 EVOLUTIONARY COMPUTING (24ENGCS010).DOCX</u>
75	<u>24ENGCS011 FINANCIAL MARKET & INTERMEDIARIES.DOCX</u>
76	<u>24ENGCS012 GENERATIVE ARTIFICIAL INTELLIGENCE.DOCX</u>

77	<u>24ENGCS013 INFORMATION AND NETWORK SECURITY.DOCX</u>
78	<u>24ENGCS014 MEDICAL IMAGE PROCESSING.DOCX</u>
79	<u>24ENGCS015 NATURAL LANGUAGE PROCESSING.DOCX</u>
80	<u>24ENGCS016 PATTERN RECOGNITION.DOCX</u>
81	<u>24ENGCS017 REINFORCEMENT LEARNING.DOCX</u>
82	<u>24ENGCS018 STATISTICAL ANALYSIS FOR MACHINE LEARNING.DOCX</u>
83	<u>24ENGME01 RELIABILITY ANALYSIS.DOCX</u>
84	<u>24ENGME02 TOTAL QUALITY MANAGEMENT.DOCX</u>
85	<u>24ENGME03 COMPOSITE MATERIALS.DOCX</u>
86	<u>24ENGME04 ADVANCES IN KNOWLEDGE DATA DISCOVERY.DOCX</u>
87	<u>24ENGME05 DESIGN OF EXPERIMENTS.DOCX</u>
88	<u>24ENGME06 ALTERNATE FUELS FOR I C ENGINE.DOCX</u>
89	<u>24ENGME07 MATERIALS CHARACTERIZATION.DOCX</u>
90	<u>24ENGME08 KNOWLEDGE DISCOVERY IN MACHINE LEARNING METHODOLOGY.DOCX</u>
91	<u>24HSC701 NURSING SCIENCE AND THEORY DEVELOPMENT INCLUDING NURSING LEADERSHIP.DOCX</u>
92	<u>24HSC702 CHILD HEALTH NURSING.DOCX</u>
93	<u>24HSC703 OBSTETRICAL & GYNAECOLOGICAL NURSING.DOCX</u>
94	<u>24HSC704 MENTAL HEALTH NURSING.DOCX</u>
95	<u>24HSC705 COMMUNITY HEALTH NURSING.DOCX</u>

96	<u>24HSC706 MEDICAL SURGICAL NURSING.DOCX</u>
97	<u>24HSC707 ADULT & PEDIATRIC NEUROREHABILITATION.DOCX</u>
98	<u>24HSC708 PHYSIOTHERAPY IN NEURO-PSYCHOSOMATIC DISORDERS.DOCX</u>
99	<u>24HSC713 CARDIAC REHABILITATION & FITNESS.DOCX</u>
100	<u>24HSC714 COMMUNITY BASED REHABILITATION.DOCX</u>
101	<u>24HSC715 PHYSIOTHERAPY IN MUSCULOSKELETAL CONDITIONS.DOCX</u>
102	<u>24MAT001 NON-LINEAR OPTIMIZATION.DOCX</u>
103	<u>24MAT002 NON-LINEAR DIFFERENTIAL EQUATIONS.DOCX</u>
104	<u>24MAT003 DYNAMICAL SYSTEM.DOCX</u>
105	<u>24PHY001 MATERIALS AND CHARACTERIZATION.DOCX</u>
106	<u>24PHY002 EXPERIMENTAL TECHNIQUES IN CONDENSED MATTER PHYSICS.DOCX</u>
107	<u>24PHY003 SOLID STATE IONICS.DOCX</u>
108	<u>24PHY004 BATTERY TECHNOLOGY AND ANALYTICAL TECHNIQUES.DOCX</u>
109	<u>24PHY005 ADVANCED MAGNETIC MATERIALS AND APPLICATIONS.DOCX</u>
110	<u>24PHY006 NANO MATERIALS FOR ENERGY AND ENVIRONMENT.DOCX</u>
111	<u>24PPA01 MODERN PHARMACEUTICAL ANALYTICAL TECHNIQUES.DOCX</u>
112	<u>24PPA04 ADVANCED INSTRUMENTATION TECHNIQUES.DOCX</u>
113	<u>24PPC01 PHARMACEUTICAL CHEMISTRY.DOCX</u>

114	<u>24PPC02 COMPUTER AIDED DRUG DESIGNING.DOCX</u>
115	<u>24PPC03 ADVANCES IN DRUG DISCOVERY.DOCX</u>
116	<u>24PPH01 NANO-BASED DRUG DELIVERY SYSTEMS.DOCX</u>
117	<u>24PPL03 ADVANCED PHARMACOLOGY & TOXICOLOGY.DOCX</u>
118	<u>24PPL05 BASIC PHARMACOLOGY MECHANISMS AND APPLICATIONS.DOCX</u>
119	<u>24PPL06 PHARMACOLOGY OF NEURODEGENERATIVE DISORDERS.DOCX</u>
120	<u>24PPL07 CONCEPTS OF ONCOLOGY AND CANCER SCREENING MODELS.DOCX</u>
121	<u>24PQA01 PHARMACEUTICAL QUALITY ANALYSIS.DOCX</u>
122	<u>24PQA02 ADVANCED PHARMACEUTICAL FORMULATION TECHNIQUES.DOCX</u>
123	<u>24SCA001 DEEP LEARNING FOUNDATIONS AND APPLICATIONS.DOCX</u>
124	<u>24SCA002 GENERATIVE AI FOR EFFECTIVE SOFTWARE DEVELOPMENT.DOCX</u>
125	<u>24SCA003 PRECISION AGRICULTURE TECHNOLOGIES AND DATA ANALYSIS.DOCX</u>
126	<u>24SCA004 EXPLAINABLE AI-INTERPRETING, EXPLAINING AND VISUALIZING DEEP LEARNING.DOCX</u>
127	<u>24SOL001 MULTI DIMENSIONS OF LEGAL EDUCATION.DOCX</u>
128	<u>24SOL002 PROTECTION OF CHILDREN FROM SEXUAL OFFENCES ACT, 2012.DOCX</u>
129	<u>24SOL003 TAX TRANSPARENCY LAWS.DOCX</u>
130	<u>24SOL004 ANTI-DEFECTION LAW.DOCX</u>

