Resolution No. AC/I/(23-24).3.RUA8

S. P. Mandali's Ramnarain Ruia Autonomous College

(Affiliated to University of Mumbai)



Syllabus for

Program: F.Y.B.A.

Program Code: (RUAPHI)

As per the guidelines of National Education Policy 2020-Academic year 2023-24)

(Choice based Credit System)



PROGRAM OUTCOMES

S. P. Mandali's Ramnarain Ruia Autonomous College has adopted the Outcome Based Education model to make its science graduates globally competent and capable of advancing in their careers. The Bachelors Program in Science also encourages students to reflect on the broader purpose of their education.

РО	PO Description
	A student completing Bachelor's Degree in Science program will be able to:
PO 1	Demonstrate understanding and skills of application of knowledge of historical and
	contemporary issues in the social and linguistic settings with a transdisciplinary
	perspective to make an informed judgement.
PO 2	Analyse and evaluate theories of individual and social behaviour in the familiar contexts
	and extrapolate to unfamiliar contexts in order to resolve contemporary issues.
PO 3	Effectively and ethically use concepts, vocabularies, methods and modern technologies
	in human sciences to make meaningful contribution in creation of information and its
	effective dissemination
PO 4	Explore critical issues, ideas, phenomena and debates to define problems or to
	formulate hypotheses; as well as analyze evidences to formulate an opinion, identify
	strategies, evaluate outcomes, draw conclusions and/or develop and implement
	solutions.
PO 5	Demonstrate oral and written proficiency to analyse and synthesise information and
	apply a set of cognitive, affective, and behavioural skills to work individually and with
	diverse groups to foster personal growth and better appreciate the diverse social world
	in which we live.
PO 6	Develop a clear understanding of social institutional structures, systems, procedures, and
	policies existing across cultures, and interpret, compare and contrast ideas in diverse
	social- cultural contexts, to engage reasonably with diverse groups.
PO 7	React thoughtfully with emotional and moral competence to forms of expressive direct
	action and apply social strategies toward eradicating threats to a democratic society and
	a healthy planet.
PO 8	Articulate and apply values, principles, and ideals to the current societal challenges by
	integrating management and leadership skills to enhance the quality of life in the civic
	community through actions that enrich individual lives and benefit the community.



PROGRAM SPECIFIC OUTCOMES

PSO	Description
	A student completing Bachelor's Degree in Science program in the
	subject of Statistics will be able to:
PSO 1	Understand and appreciate the framework of morality in the Indian and western context
PSO 2	Critically analyze daily life situations and problems and come up with efficient solutions
PSO 3	Comprehend the underlying moral dimensions of any given situation, analyze them and make morally sound judgements
PSO 4	Appreciate the deep-rooted heritage of Indian and Western philosophical thought and its influence on the society.
PSO 5	Imbibe the values of tolerance, secularism, acceptance, objectivity and respect to other people's faiths, beliefs, opinions and different.
PSO 6	Cultivate a spirit of rationality and logical thinking by enhancing argumentative and analytical skills involved in philosophical reasoning.
PSO 7	Bring various theoretical and philosophical concepts to the realm of reality and learn their implications to real life.
PSO 8	Develop an ethical understanding about different contemporary issues concerning the current society.



CREDIT STRUCTURE BA

Semeste r	Subjec	DS E	Subjec t 2	GE/ OE course (Across disciplines	Vocational and Skill Enhancemen t Course (VSC) & SEC	Ability Enhancement Course/ VEC/IKS	OJT/FP/CEPCC , RP	Total Credit s
1	4		4	4 (2*2)	VSC-2 + SEC -2	AEC- 2 (CSK) + VEC- 2 (Understandin g India) + IKS- 2	5	22
2	4		4	4 (2*2)	VSC-2+ SEC -2	AEC-2 (CSK)+ VEC-2 (Env Sc)	CC-2	22
Total	8		8	8	8	10	2	44
Exit opti	ion: awaı			-		s and an additiona Major and Minor	I 4 credit Core I	NSQF
3	Majo r 8		Minor 4	2	VSC-2	AEC-2 MIL	FP -2, CC-2	22
4	Majo r 8		Minor 4	2	SEC-2	AEC-2 MIL	CEP-2, CC-2	22
Total	16		8	4	4	4	8	44

Exit option: award of UG Diploma in Major with 88 credits and an additional 4 credit Core NSQF course/ Internship or Continue with Major and Minor



	5	DSC 12	DS E	Minor		VSC-2- Major		CEP/FP-2	22
	6	DSC 12	DS E 4	Minor 2				OJT-4	22
	Total	24	8	4		2		6	44
		Exit	option:	award of		in Major with Honours/ Res	132 credits or Cor earch	ntinue with	
							201		
							0//		
					-				
				0	110				
		0							
Q	3/10								
						4			



CREDIT STRUCTURE BSc

Semeste	Subje	ct 1	Cultina	GE/ OE course	Vocational and Skill	Ability	OJT/FP/CEPCC	Total
semeste			Subjec t 2	(Across	Enhancemen	Enhancement	, RP	Credit
'	DSC	DS		disciplines	t Course	Course/ VEC/IKS	,,,,,	s
		E)	(VSC) & SEC			
					VSC-2 +	AEC- 2 (CSK)		
1	4		4	4 (2*2)	V3C-2 + SEC -2	+ VEC- 2 (Env		22
					3EC -2	Sc.) + IKS-2		
					~ O)	AEC-2 (CSK)+		
	_			. (0.10)	VSC-2+	VEC-2		
2	4		4	4 (2*2)	SEC-2	(Understandin	CC-2	22
						g India)		
				. \		,		
Total	8		8	8	8	10	2	44
Exit opt	ion: awa	rd of U	G certifica	ate in Major	with 44 credits	s and an additiona	I 4 credit Core N	NSQF
		С	ourse/ In	ternship or (Continue with	Major and Minor		
			_					
	Majo		Minor					
3	r.8	•	4	2	VSC-2	AEC-2 MIL	FP -2, CC-2	22
	Majo		Minor					
4	r 8		4	2	SEC-2	AEC-2 MIL	CEP-2, CC-2	22
	. 5		-					
Total	16		8	4	4	4	8	44



	Exit option: award of UG Diploma in Major with 88 credits and an additional 4 credit Core NS course/ Internship or Continue with Major and Minor						
5	DSC 12	DS E 4	Minor 2		VSC-2		CEP/FP-2
6	DSC 12	DS E 4	Minor 2				OJT-4
Total	24	8	4		2		6
	Exit	option:	award of	_	in Major with Honours/ Res	132 credits or (Continue with
					Nicol		
			R				



Course Code: RUAVSCPHI.O101

Course Title: Critical Thinking

Type of Course: Vocational Skill-based course

Academic year 2023-24

COURSE OUTCOMES:

COURSE	DESCRIPTION
OUTCOME	A student completing this course will be able to:
CO 1	Introducing students to Critical Thinking and the methodologies
CO 2	Identifying types of beliefs, claims, and issues in Critical Thinking
CO3	Understanding the science of arguments and developing argumentation
CO4	Developing proofs and supporting evidence in an argument
CO5	Identifying flaws in an argument

COURSE OUTCOMES:

After completion of this course, students will be able to:

COURSE	DESCRIPTION
OUTCOMES	
CO1	Understand the concepts in Critical Thinking and adopt its methodology
CO2	Discriminate between opinions and facts, subjective and objective beliefs
CO3	Adopt a systematic approach to arguments
CO4	Support arguments with the best suitable evidence and proofs
CO5	Identify flaws in arguments presented to them



DETAILED SYLLABUS

Course Code	Unit	Course/ Unit Title	Credits/ Hours
RUAVSCPHI.0101		Introduction to Critical Thinking	2
	Unit I	Basics of Critical Thinking	15
		 a) Critical thinking: definitions, uses, and barriers b) Components of CT: beliefs and claims, facts and opinions, issues and arguments c) Methodology of Critical Thinking 	
	Unit II	The Nuts and Bolts of Arguments	15
		 a) Understanding argument, nuts and bolts of arguments, soundness, and validity b) Finding proofs and evidence: primary vs secondary sources, selecting the best evidence, eye-witness, testimony, reputable sources, etc c) Identifying flaws in arguments: false analogies, defective generalizations, emotive language, etc 	

References:

- Bowell and Kemp. Critical Thinking: A Concise Guide. Routledge, 2010.
- Fisher, Alec. Critical Thinking. Cambridge University Press, 2011.
- Moore and Parker. Critical Thinking. Mc-Graw Hill, 1986 (original year of publishing)
- Allen, Matthew. Smart Thinking: Skills for Critical Understanding and Writing. Oxford University Press, 1997 (original year of publishing)



Modality of Assessment: Vocational Skill-based course (2 Credit Theory Course for BA)

A) Internal Assessment- 40%- 20 Marks

Sr No	Evaluation type	Marks
1	Class Test/ Project / Assignment / Presentation	20

B) External Examination (Semester End)- 60%- 30 Marks Semester End Theory Examination:

- 1. Duration The duration for these examinations shall be of **One hour.**
- 2. Theory question paper pattern:

Paper Pattern:

Question	Options	Marks	Questions Based on
1	A or B	15	Unit I
2	A or B	15	Unit II
	TOTAL	30	



Course Code: RUAVSCPHI.E111

Course Title: Critical thinking: Advanced

Type of course: Vocational Skill- Based course

Academic year 2023-24

COURSE OBJECTIVES:

COURSE	DESCRIPTION
OBJECTIVES	
1	Training students to evaluate various claims and their credibility
2	Learning various persuasion techniques and ways to identify them
3	Understanding techniques to argue back
4	Learning problem-solving, goal-setting, and decision-making.
5	Learning the relationship between critical thinking and emotions

COURSE OUTCOMES:

After completion of this course, students will be able to:

COURSE OUTCOMES	DESCRIPTION
CO 1	Evaluate various sources and rate their credibility
CO 2	Identify persuasion in any content and successfully learn to counter argue with people
CO 3	Implement problem-solving, decision-making, and goal-setting skills in their lives
CO 4	Analyze and manage their emotions effectively



DETAILED SYLLABUS:

Course Code/ Unit	Unit	Course/ Unit Title	Credits/ Lectures
RUAVSCPHI.E111		Critical Thinking: Advanced	2
	Unit I	Judging information critically	15
		 a) Judging credibility of sources: claim and personal observations, expertise, background check, vested interests, etc b) Techniques of persuasion: loaded terms, loaded questions, vague terms, false confidence, misleading stats, appeal to guilt and pity, etc c) How to argue back: counter-examples, explaining weak argument, absurd examples, counter-arguments, etc 	
. ?	Unit II	CT and individual development	15
Sililia		 a) CT and problem-solving: working backward, heuristics, etc b) Decision making and goal setting: Decision-making models and SMART goal setting c) Practical/ CT and emotional management 	



Books for reference:

- Bowell and Kemp. Critical Thinking: A Concise Guide. Routledge, 2010.
- Fisher, Alec. Critical Thinking. Cambridge University Press, 2011.
- Moore and Parker. Critical Thinking. Mc-Graw Hill, 1986 (original year of publishing)
- Allen, Matthew. Smart Thinking: Skills for Critical Understanding and Writing. Oxford University Press, 1997 (original year of publishing)



Modality of Assessment: Vocational Skill- based Course (2 Credit Theory Course for BA)

A) Internal Assessment- 40%- 20 Marks

Sr No	Evaluation type	Marks
1	Class Test/ Project / Assignment / Presentation	20

B) External Examination (Semester End)- 60%- 30 Marks Semester End Theory Examination:

- 1. Duration The duration for these examinations shall be of **One hour.**
- 2. Theory question paper pattern:

Paper Pattern:

Question	Options	Marks	Questions Based on
1	A or B	15	Unit I
2	A or B	15	Unit II
4	TOTAL	30	