

# M.Sc. (Forensic Psychology) SEMESTER IV

#### MSFPSYN401 FORENSIC PSYCHOLOGY-INVESTIGATIVE METHODS

COURSE CODE			Teaching & Evaluation Scheme								
	CATEGORY	COURSE NAME	Theory			Practical					
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*	Th	Т	P	Credits
MSFPSYN401	DC	Forensic Psychology- Investigative Methods	60	20	20	30	20	3	0	2	4

**Legends**: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit.

## Course Objectives: The aim of the course is to teach the students –

- 1) Interviewing technique and Neurological testing.
- 2) Role of Forensic psychologist
- 3) Principles of Lie Detection Technique

## Course Outcomes: After studying the courses, the student will be able to understand –

- 1) Neurological functions and Lie detection technique.
- 2) Neuroimaging Technique and detection method.
- 3) Brain Oscillation and signature profiling.

### **UNIT 1:**

Crime scene investigation, interviewing technique, Vulnerable witnesses, Interviewing suspects Facet –meta theory, Neurobiological forensic testing and investigation, Role of Forensic psychologist in profiling, Crime Reconstruction, Rationale, Utility and Limitation.

#### **UNIT 2:**

Scientific Investigative Technique, Technique of lie detection, Introduction of polygraph and birth of polygraph, recent development of polygraph design, Pre- Test and Post- test, Accuracy, Conclusion, legal perspective, Case studies.

#### **UNIT 3:**

Brain Electrical Oscillation Signature Profiling: Definition, Procedure of examination, Electrical Properties of Neuron, Amplitude &Latency, Application of BEOS in forensic investigation, Working principle & Scientific Basis of BEOS, Concept of Experiential Knowledge; Scientific Basis of Testing Procedure (Pre-test, Administration & Post-test) and Requirements, Understanding the Graphs, Scoring Procedure for Analysis, Report-writing, Legal Perspective Case Studies.

<sup>\*</sup>Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.



# M.Sc. (Forensic Psychology) SEMESTER IV

#### **UNIT 4:**

Suspect Detection system (SDS) – History, Scientific approach (Physiological & Theoretical Understanding), Instrument & its Underlying Mechanisms; Testing Procedure; Types of Questions; Results and Analysis; Report Writing, Case Studies, Legal perspective, Validity& Reliability; Sensitivity & Specificity and Limitations.

#### **UNIT 5:**

Forensic Psychological Techniques, Forensic Statement Analysis; Eye-detection Techniques; Handwriting Analysis; Non-verbal Behavioural Assessment; and other Investigative Tools Technique.

#### **Practical:**

- 1. To Introduce the Question Formats of Polygraph
- 2. To Understand the Administration of Polygraph
- 3. Practical Screening Technique: Suspect Detection System (SDS)
- 4. To prepare the pattern of Question of Suspect detection System
- 5. To Understand the Administration of SDS.
- 6. Case Study

### **Suggested Readings:**

- 1. Amin, M., & Singh, J. S. (2014). Forensic Science in Criminal Investigations. Unique Law Publishers.
- 2. Gordon, N. J., & Fleisher, W. L. (2010). Effective Interviewing and Interrogation Techniques, Third Edition (3rd ed.). Math, S. B. (2011).
- 3. Supreme Court judgment on polygraph, narco-analysis & brain-mapping: a boon or a bane. The Indian Journal of Medical Research, 134(1), 4–7. Mukundan, Champadi R, Wagh, N. B., Khera, G., &Khandwala, S. U. (2008).
- 4. Normative Data for Brain Electrical Oscillations Activation Profiling. Gandhinagar, Gujarat, India: Technology Information Forecasting & Assessment Council (TIFAC), Department of Science and Technology, Government of India, New Delhi.
- 5. Reid, J., &Inbau, F. (1997). Truth and Deception The Polygraph (Lie-detector) technique (2nd ed.). Waverly Press. Inc.

Vishwavidvalava, Indore



# M.Sc. (Forensic Psychology) **SEMESTER IV**

#### MSFPSYN402 FORENSIC PSYCHOLOGICAL FORMULATIONS AND REPORTS

COURSE CODE				uation S	Scheme						
	CATEGORY		Theory			Practical					
		COURSE NAME	END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*	Th	Т	P	Credits
MSFPSYN402	DC	Forensic Psychological Formulations and reports	60	20	20	30	20	3	0	2	4

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit.

## Course Objectives: The aim of this course is to teach students –

- 1)Scientific methods of crime.
- 2)Psychological Variables and methods of data collection
- 3) Methods of collection of data and report writing.

## Course Outcomes: After studying this course, students will be able to -

- 1) Write a proper report and case study analysis.
- 2) Computer assisted analysis of qualitative data.
- 3) Scientific Writing

#### UNIT 1:

Scientific Method of examination and report writing – Features, Problems in Measurement in Behavioural Sciences; Levels of Measurement of Psychological Variables - Nominal, Ordinal, Interval and Ratio Scales.

#### **UNIT 2:**

Methods for Collecting Data - Participants Observation, Interviews, Interviews Questions, Analysing Qualitative Data, Case Studies - Diary Method, Films and Videos, Photographs, the Role of Theory in observation.

#### **UNIT 3:**

Quality Assurance in Qualitative Analysis, Authenticity of report, Advancing Theory, Transparency of report writing and Presentation, Case Study of Analysing and Interpreting the Data Observations from tests of lie detector, BEOS profiling, speech analysis etc.

<sup>\*</sup>Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.



# M.Sc. (Forensic Psychology) SEMESTER IV

#### **UNIT 4:**

Computer-Assisted data analysis, Introduction and Purpose of Scientific Writing, Overview Of Research Communications, Steps In Scientific Writing - Format and Writing a Research Paper, Format and Writing A Review Article, Journal review.

#### **UNIT 5:**

Roll of mental Health professionals - psychiatrists & clinical psychologist Physicians, Correctional officers (jail supervisors & Superintendent) attitudes, officer inmate interactions, social worker & occupational therapist.

#### **Practical:**

- 1. Role play in various interviewing technique.
- 2. To review a case study and report Writing.
- 3. To perform the data collection from various methods
- 4. Computer assisted analysis of Qualitative data.

## **Suggested Readings:**

- 1. Baron, R.A. and Byrne, D (2000). Social Psychology, 8th Edition, Prentice Hall of India Pvt. Ltd., New Delhi. Kuppuswamy, B (1980),
- 2. An Introduction to Social Psychology, 2nd Revised edition, (reprinted, 2004), Asia Publishing House, Mumbai.
- 3. Myers, G. David (2008), Social Psychology, 9th edition, The McGraw Hill Companies, Inc.
- 4. Santrock, J.W. (2011). A topical Approach to life-Span Development. New Delhi: Tata McGraw-Hill Edition.
- 5. Jackson, A. F., & Bolger, D. J. (2014). The neurophysiological bases of EEG and EEG measurement: A review for the rest of us. Psychophysiology, 51(11), 1061–1071
- 6. Cropley, A. J. (2019). Qualitative research methods: A practice-oriented introduction for students of psychology and education. 2nd updated, revised, and enlarged edition. Riga, Latvia: Zinātne. (open access doi: 10.13140/RG.2.1.3095.6888)
- 7. Creswell, J. W., and Poth, C. N. (2017). Qualitative inquiry and research design: Choosing among five approaches. Los Angeles, CA: Sage.



# SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA, INDORE SHRI VAISHNAV INSTITUTE OF FORENSIC SCIENCE

# M.Sc. (Forensic Psychology) SEMESTER IV

#### MSFPSYN403 CORRECTIONAL INSTITUTION

			Teaching & Evaluation Scheme								
COURSE CODE	CATEGORY	COURSE NAME	END SEM University Exam	Two Term According Exam	Teachers Assessment*	END SEM University Exam	chers sment*	Th	Т	P	Credits
MSFPSYN403	DC	Correctional Institution	60	20	20	30	20	3	0	2	4

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit.

## Course Objectives: The aim of the course is to teach the students –

- 1) Correctional institutions and their types
- 2) Principles of risk and juvenile Rehabilitation
- 3) Juvenile needs and responsibility

## Course Outcomes: After studying the courses, the student will be able to understand –

- 1) Correctional rehabilitation and treatment
- 2) About the conditions of women prisoners
- 3) Challenges of correctional process

## **UNIT 1:**

Institute of Corrections – definition and type, rehabilitation Overview of Correctional Facilities; confinement of person suspected of a crime; Career opportunities in correctional homes; Legal Rights, Right to Treatment, Right to Refuse Treatment, Right to Rehabilitation, Privacy and Confidentiality.

#### **UNIT 2:**

Risk Assessment in correctional process, Principles of Risk, Needs and Responsivity (RNR), Juvenile Amenability to Rehabilitation, Life without Parole, Disposition, Conducting the Evaluation, Out-of-Home Placements, Juvenile Detention, Initial Inmate Screening and Classification, Crisis Intervention.

<sup>\*</sup>Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.



# SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA, INDORE SHRI VAISHNAV INSTITUTE OF FORENSIC SCIENCE

# M.Sc. (Forensic Psychology) SEMESTER IV

#### **UNIT 3:**

Correctional Rehabilitation and Treatment Approaches to Rehabilitation, Group Home Models, Functional Family Therapy, Cognitive-Behavioural Treatment, Substance Abuse Models, Violence-Prevention Programs, Treatment Programs, Treatment of Special Populations, Substance Abusing Offenders, Violent Offenders, Criminal Psychopaths, Sex Offenders (Juvenile and Adults), Women Prisoners

## **UNIT 4:**

Key Issues and Challenges in Corrections Obstacles to the Treatment of Inmates: Confidentiality, Coercion, Environment, Community-Based Corrections.

#### **UNIT 5:**

Roll of mental Health professionals - psychiatrists & clinical psychologist in correctional institutions, Physicians, Correctional officers (jail supervisors & Superintendent) attitudes, officer inmate interactions, social worker & occupational therapist.

#### **Practical:**

The students will have to visit to Correctional centers for Adult and Juvenile. They will be asked to write a report for the same.

## **Suggested Readings:**

- 1. Amin, M., & Singh, J. S. (2014). Forensic Science in Criminal Investigations. Unique Law Publishers.
- 2. Gordon, N. J., & Fleisher, W. L. (2010). Effective Interviewing and Interrogation Techniques, Third Edition (3rd ed.). Math, S. B. (2011).
- 3. Supreme Court judgment on polygraph, narco-analysis & brain-mapping: a boon or a bane. The Indian Journal of Medical Research, 134(1), 4–7. Mukundan, Champadi R, Wagh, N. B., Khera, G., &Khandwala, S. U. (2008).
- 4. Normative Data for Brain Electrical Oscillations Activation Profiling. Gandhinagar, Gujarat, India: Technology Information Forecasting & Assessment Council (TIFAC), Department of Science and Technology, Government of India, New Delhi.
- 5. Reid, J., &Inbau, F. (1997). Truth and Deception The Polygraph (Lie-detector) technique (2nd ed.). Waverly Press. Inc.



# M.Sc. (Forensic Psychology) **SEMESTER IV**

#### MSFPSYN404 MAJOR RESEARCH PROJECT

			TI					CHING&EVALUATION SCHEME						
COURSE CODE			THEORY			PRACTICAL								
	CATEGORY	COURSENAME	ENDSEM University Exam	Two Term Exam	Teachers Assessment*	ENDSEM University Exam	Teachers Assessment*	L	Т	P	CREDITS			
MSFPSYN404	DC	Major Research project	0	0	0	60	40	0	0	0	12			

In this Course, Students shall be attached to Juvenile (Correctional) Homes and work on the research project of its relevant interest. This will give exposure to the students to handle the real cases and analysis of evidence. The students will also have to submit a report for the studied Cases .