

To,

The Registrar
M.J.P. Rohilkhand University,
Bareilly

17/05/2021

Subject – Regarding Revision of Syllabus of Psychology in virtual meeting of Board of Studies, in reference to Common Minimum Syllabus under NEP -2020.

Respected Madam,

In reference to your letter No- R.U./ Academic(शैक्षणिक)/2021, Dated – 28/04/2021, I would like to inform you that a virtual meeting(On Zoom)of Board of Studies, Psychology in reference to Common Minimum Syllabus under NEP -2020 was held on 15/ 05/2021. In this meeting the Common Minimum Syllabus of Psychology was accepted with some minor modifications. In this virtual meeting the following teachers have participated:

S.No	Name	College/ University	Designation
1.	Dr. Alpana Agarwal	Department of Psychology, C.C.S University , Meerut	External Expert
2.	Dr. Sandaya Saxena	Principal , Avanti Bai Lodhi Government Girls Degree College, Bareilly	Member, Coordination Committee, MJPRU, Bareilly
3.	Dr. Suneel Chaudhary	Department of Psychology, K.G.K.(P.G.)College, Moradabad	Convener
4.	Dr. Seema Gupta	Department of Psychology, G.D.H.D. College, Moradabad	Member
5.	Dr. Meenu Vishnoi	Department of Psychology, K.G.K.(P.G.)College, Moradabad	Member
6.	Shri Nikhil Kumar Das	Department of Psychology, J.S.H. College, Amroha	Member
7.	Shri Sunil Kumar	Department of Psychology, Hindu College, Moradabad	Member

8.	Dr. Karuna Anand	Department of Psychology, G.D.H.D. College, Moradabad	Member
----	------------------	---	--------

The revised/ accepted Common Minimum Syllabus of Psychology is attached herewith. The proceedings of the BOS meeting are given on the page number 32 and 33 of the syllabus.

With regards

Yours truly



(Dr Suneel Chaudhary)

Convener
Board of Studies, Psychology
M.J.P. Rohilkhand University ,
Bareilly



M.J.P. ROHILKHAND UNIVERSITY, BAREILLY
REVISED SYLLABUS OF B.A. PSYCHOLOGY

Based on
 National Education Policy-2020
 Common Minimum Syllabus for all U.P. State Universities

Semester-wise Titles of the Papers in BA (PSYCHOLOGY)

Year	Sem.	Course Code	Paper Title	Theory/Practical	Credits
B.A.1	I	A090101T	Foundations of Psychology	Theory	4
	I	A090102P	Lab Work/ Psychological Testing	Practical	2
	II	A090201T	Basic Methodology and Statistics	Theory	4
	II	A090202P	Lab Work/ Psychological Testing	Practical	2
B.A. 2	III	A090301T	Psychology of Social Behavior	Theory	4
	III	A090302P	Lab Work and Measurement of Social Behavior	Practical	2
	IV	A090401T	Abnormal Psychology	Theory	4
	IV	A090402P	Screening and Assessment	Practical	2
B.A. 3	V	A090501T	Human Development	Theory	4
	V	A090502T	Positive Psychology	Theory	4
	V	A090503P	Lab Work/Survey/ Field Visit	Practical	2
	V	A090504R	Problem Identification & Research Proposal Writing	Project	3
	VI	A090601T	Community and Health Psychology	Theory	4
	VI	A090602T	Counseling Psychology	Theory	4
	VI	A090603P	Survey/Field Visit/Project Work	Practical	2
	VI	A090604R	Research Project	Project	3

Syllabus Developed by:

S. No.	Name	Designation	Department	College/ University
1	Dr. N.K. Saxena	Retired Principal & HoD	Department of Psychology	PPN PG College (CSJM University), Kanpur
2	Dr. Anubhuti Dubey	Professor & Head	Department of Psychology	Deen Dayal Upadhyay Gorakhpur University, Gorakhpur
3	Dr. Dhananjay Kumar	Professor	Department of Psychology	Deen Dayal Upadhyay Gorakhpur University, Gorakhpur

Undergraduate Psychology Program**Semester-wise Course Curriculum**

Subject prerequisites: Open to all.

Program Outcome (After 3 Years)

The learning outcomes that a student should be able to exhibit on completion of a degree level program in Psychology are as follows:

- (i) Comprehension about the discipline, its research methods, related theories and models.
- (ii) Knack to link up theory with individual experiences and varied applied settings.
- (iii) Capacity to practice professional skills in the area of psychological testing, assessment and counseling.

- (iv) Development of skills in specific areas related to specific specialization (e.g. psych diagnostics, counseling, learning disability, health, community mental health and organizational behavior).
- (v) A general understanding about how knowledge of psychology can be applied to benefit the management and/or amendment of problems of mankind.
- (vi) Capability to articulate ideas in appropriate manner, with scientific writing and authentic reporting.
- (vii) Sensitivity towards diverse contexts, ethnic groups, minorities, marginalized groups and gender issues
- (viii) Development of skills and attributes of empathy, team work, coordination, cooperation, conflict resolution, and congruence.

Semester I

Paper 1

Theory

Program/Class: Certificate	Year: First	Semester: First
Subject: Psychology		
Course Code: A090101T	Course Title: Foundations of Psychology	
<p>Course Outcome: The students will learn about the fundamental processes and core psychological concepts, models, classical theories, varied perspectives, and will be able to apply them in their own and in others lives. It will also give the learner a clear understanding of the concepts like intelligence, motivation, emotion and personality. It will develop critical analytical skills regarding these individualistic traits.</p>		
Credits: 4	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 10+25	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		

Unit	Topics	No. of Lectures
I	Psychology: Nature, Scope and Applications; Approaches: Psychodynamic, Behavioristic, Cognitive, Humanistic & Indigenous Indian Psychology (with special reference to Shrimad Bhagwad Gita, Sankhya Darshan and Buddhism); Methods: Experimental, Correlational, and Observational.	8
II	Attention Processes: Selective and Sustained Attention: Nature and Determinants; Perceptual Processes: Nature and Determinants; Perceptual Organization; Perceptual Illusion; Form and Depth Perception.	7
III	Learning: Classical Conditioning, Operant Conditioning; Cognitive Learning Theories: Tolman's Latent Learning, Köhler's Insight Learning, Bandura's Observational Learning; Verbal Learning: Methods and Procedures.	8
IV	Memory and Forgetting: Stages of Memory: Encoding, Storage and Retrieval; Types of Memory: Sensory, Short Term (Working Memory) and Long Term Memory; Reconstructive Memory; Methods of Measuring Memory; Techniques of Improving Memory; Forgetting: Decay, Interference and Cue-Dependent Forgetting.	7
V	Intelligence: Nature and Definition; Concept of IQ; Theories of Intelligence (Basic Concepts): Spearman, Thurston, Guilford, Sternberg, Gardner; Intelligence Tests: Individual and Group tests.	8
VI	Personality: Definition and Determinants; Approach of Personality (Basic Concepts): Trait approaches (Allport and Cattell); Psychodynamic (Freud); Humanistic (Rogers and Maslow); Socio-cultural (Bandura); Personality in Indigenous Tradition (Advaita Vadanta tradition, Yoga tradition, & Ayurveda tradition).	9
VII	Motivation: Nature and Concept (Needs, Drives, Instincts); Types of Motives: Biological and Social Motives; Pull and Push Mechanism; Intrinsic Motivation.	7
VIII	Emotion: Nature of Emotion; Basic Emotions; Expressions of Emotion: Universal Versus Culture Specific; Theories of Emotion: James-Lange, Cannon-Bard, Schachter-Singer, Lazarus.	6

Suggested Readings:

1. Baron, R. & Misra, G. (2016). *Psychology* (5th edition). New Delhi: Pearson.
2. Ciccarelli, S. K., White, N.J., & Misra, G. (2017). *Psychology* (5th ed., South Asian Edition). New Delhi: Pearson Education.
3. Cornelissen, M., Mishra, G. & Verma, S. (2014). *Foundations of Indian Psychology*. New Delhi: Pearson Education.
4. De Silva, P. (2005). *An introduction to Buddhist psychology*. Springer.
5. Galotti, K.M. (2014). *Cognitive Psychology: In and Out of the Laboratory* (5th ed.). New Delhi: Sage.
6. Feldman, R. S. (2006). *Understanding Psychology*. India: Tata McGraw Hill.
7. Mishra, G. (Edited) (2019). Personality in Indigenous Tradition. In ICSSR Research Surveys & explorations Psychology (Vol.2): Individual and the Social Processes & Issues. New Delhi: Oxford University Press.
8. Morgan, C.T., King, R.A., Weiss, R.A., & Schopler, J. (2004). *Introduction to Psychology* (7th ed.). New York: McGraw Hill.
9. Nolen-Hoeksema, S., Fredrickson, B.L., Loftus, G.R., & Wagenaar, W.A. (2009). *Atkinson & Hilgard's Introduction to Psychology* (15th Edition). Wadsworth Cengage Learning
10. Suhotra (2007). *Vedantic Psychology: India's ancient vision of the Mind*. The Bhaktivedanta Academy.
11. Swami Akhilanand (2001 edition). *Hindu Psychology: It's meaning for the West*. Taylor & Francis.
12. सिंह, अरुण कुमार(2006). उच्चतर सामान्य मनोविज्ञान। वाराणसी: मोतीलाल बनारसीदास प्रकाशन।
13. त्रिपाठी, ला० ब० एवं अन्य (2001). आधुनिक प्रायोगिक मनोविज्ञान। आगरा: हरप्रसाद भार्गव।
14. Zimbardo, P.C. & Weber, A.L. (1997). *Psychology*. New York: Harper Collins College Publishers.
15. Suggestive digital platforms web links- <http://heecontent.upsdc.gov.in/Home.aspx>
<http://www.apa.org>

This course can be opted as an elective: Open to all

Suggested Continuous Evaluation Methods: <ul style="list-style-type: none"> • Assignment/ Seminar/ Research Orientation of the student. (10 Marks) • Written Test (10 Marks) • Attendance (5 Marks)
Course prerequisites:10+2 in any discipline
Suggested equivalent online courses: <ul style="list-style-type: none"> • Coursera • Swayam

Paper 2

Practical

Program/Class: Certificate	Year: First	Semester: First
Subject: Psychology		
Course Code: A090102P	Course Title: Lab Work/ Psychological Testing	
Course Outcome: Students will be imparted a variety of skills to design and conduct psychological experiments ensuring controlled conditions, report writing and interpretations of the report.		
Credits: 2	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 10+25	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 0-0-2		
Unit	Topics	No. of Lectures
I	Any one experiment based on Attention/Perceptual Processes	08
II	Any one experiment based on Classical Conditioning/Operant Conditioning/Verbal Learning	08
III	Any one experiment based on Memory/Forgetting	07
IV	Any one experiment based on Motivational/Emotional Processes	07

Suggested Readings:
<ol style="list-style-type: none"> 1. त्रिपाठी, ला० ब० एवं अन्य (2001). आधुनिक प्रायोगिक मनोविज्ञान। आगरा: हरप्रसाद भार्गव। 2. Mohin, S.M. (1975). Experiments in psychology. New Delhi: Orient Longman. 3. Suggestive digital platforms web links- http://heecontent.upsdc.gov.in/Home.aspx
This course can be opted by the students who has opted psychology as a subject.
Suggested Continuous Evaluation Methods:
<ul style="list-style-type: none"> • Presentation of practical file (15marks) • Attendance (10 marks)
Course prerequisites: Only for those who took psychology as a subject

Semester II

Paper 1

Theory

Program/Class: Certificate	Year: First	Semester: Second
Subject: Psychology		
Course Code: A090201T	Course Title: Basic Methodology and Statistics	
Course Outcome: The learners will be able to comprehend psychological data and can put them on appropriate scaling method. Moreover, they will be getting hold of essentials of psychological testing along with various kinds of tests implemented.		
Credits: 4	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 10+25	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures

I	Measurement: Nature and Scales of Psychological Measurement; Properties and Functions of Measurement, Tests: Concept and Types.	6
II	Intelligence Testing: History, Measurement of abilities: Stanford Binet, Wechsler Test of Intelligence, Culture Fair Tests, Structure and Application.	8
III	Personality Tests: Self Report Inventories (MMPI, 16 PF, NEOPIR), Projective Techniques: Rorschach Inkblot Test and Thematic Apperception Test.	8
IV	Psychometric Properties of Tests: Validity, Reliability, Nature and Types; Norms: Concepts and Types.	8
V	Scientific Approach: Aim and Functions, Types of Research, Empirical Research Methods; Variable: Concept and Types; Hypothesis: Types and Criteria.	7
VI	Research Designs: Objectives and Criteria, Major Types, Sampling: Concept and Methods.	7
VII	Psychological Statistics: Introduction; Frequency Distribution and their Graphical Presentation: Frequency polygon, Bar Diagram, Histograms and Ogive; The Normal Distribution: meaning and uses, Descriptive Statistics, Significance of Statistics, t test.	8
VIII	Correlation; types and interpretation; Univariate Regression Analysis; Non- Parametric Tests: Chi- Square, Mann- Whitney U Test.	8

Suggested Readings:

1. Anastasi, A. (1950). *Psychological Testing*. Prentice Hall.
2. Cohen, R. J. & Swerdlik, M. E. (2018.) *Psychological Testing and Assessment: An Introduction to Tests and Measurement* (9th ed.). New York: Mc-Graw Hill Education.
3. Cronbach, L.J. (1960) (2nd Edition). *Essentials of Psychological Testing*. New York: Harper.
4. Freeman, F.S. (1962) (3rd Edition). *Theory and practice of psychological testing*. New York: Holt, Rinehart & Winston.
5. Garrett, H. E. (1966). *Statistics in Psychology and Education*. Paragon International Publishers.

<p>6. Gregory, R.J. (2014) (6th Edition). <i>Psychological Testing: History, Principles and Applications</i>. New Delhi: Pearson India Education.</p> <p>7. Guilford, J.P. (1936). <i>Psychometric Methods</i>. London: McGraw Hill Publishing Company.</p> <p>8. Kaplan, R. M, & Saccuzzo, D. P. (2018): <i>Psychological Testing: Principle, Applications and Issues</i> (9th ed.) Cengage Learning, Boston.</p> <p>9. Kerlinger, F.N. (1983). <i>Foundations of Behavioral Research</i>. New Delhi: Surjeet Publications.</p> <p>10. लाल० जे० एन० (1999). मनोविज्ञान एवं शिक्षा में सांख्यिकी, नील कमल प्रकाशन ,गोरखपुर।</p> <p>11. मिश्रा, बब्बन तथा त्रिपाठी, लाल बचन (1994). मनोवैज्ञानिक सांख्यिकी, हरप्रसाद भार्गव, आगरा।</p> <p>12. Singh, A.K. (2006). <i>Tests, Measurement and Research Methods in Behavioural Sciences</i>. Patna: Bharti Bhavan.</p> <p>13. श्रीवास्तव, डी०एन०(2011). सांख्यिकी एवं मापन, आगरा: अग्रवाल पब्लिकेशन।</p> <p>14. Suggestive digital platforms web links- http://heecontent.upsdc.gov.in/Home.aspx</p>
<p>Suggested Continuous Evaluation Methods:</p> <ul style="list-style-type: none"> • Assignment/ Seminar/ Research Orientation of the student. (10 Marks) • Written Test (10 Marks) • Attendance (5 Marks)
<p>Suggested equivalent online courses:</p> <ul style="list-style-type: none"> • Coursera • Swayam

Paper 2

Practical

Program/Class: Certificate	Year: First	Semester: Second
Subject: Psychology		

Course Code: A090202P		Course Title: Lab Work/ Psychological Testing
Course Outcome: Students will be conferred an array of skills to carry out experiments in lab settings, design and conduct psychological experiments ensuring controlled conditions, report writing and interpretations of the report.		
Credits: 2		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks: 10+25
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 0-0-2		
Unit	Topics	No. of Lectures
I	Plan, conduct and report an experiment using between group research design	08
II	Ascertain the Test-retest Reliability of any psychological test	08
III	Administer any one Self-Report Inventory on a subject, score and report	07
IV	Administer any one Intelligence Test on a subject, score and report	07
Suggested Readings:		
<ol style="list-style-type: none"> त्रिपाठी, ला० ब० एवं अन्य (2001). आधुनिक प्रायोगिक मनोविज्ञान। आगरा: हरप्रसाद भार्गव। Suggestive digital platforms web links- http://heecontent.upsdc.gov.in/Home.aspx, www.psytoolkit.org 		
This course can be opted by the students who took psychology as a subject.		
Suggested Continuous Evaluation Methods:		
<ul style="list-style-type: none"> Presentation of Practical file (15 Marks) Attendance (10 marks) 		
Course prerequisites: Only for those who took Psychology as a subject		

Semester III

Paper 1

Theory

Program/Class: Diploma	Year: Second	Semester: Three
Subject: Psychology		
Course Code: A090301T	Course Title: Psychology of Social Behavior	
<p>Course Outcome: By the end of the course, students will be able to summarize general information, through in-class discussion and assignments, pertaining to social psychological theories and an opportunity to apply social psychological theories to their lives. Critically evaluate research to understand and explain distressing human social behavior and relate social psychological concepts and theories to the context of historic and current world, national, and local events.</p>		
Credits: 4	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 10+25	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Social Psychology: Nature, and Scope; Methods of Studying Social Behavior.	8
II	Person Perception: Concept, Determinants of Impression Formation.	7
III	Social Cognition: Schema, Schematic Processing; Attribution of Causality: Harold Kelly and Bernard Weiner.	7
IV	Attitude: Nature and Formation; Measurement of Attitude; Attitude Change; Aggression: Nature, Causes and Control of Human Aggression.	8
V	Pro-social Behavior: Motives to help; Bystander Effect; Determinants; Interpersonal Attraction: Concept and Determinants.	8

VI	Social Influence Processes: Conformity and Compliance; Intergroup Relations: Prejudice and Discrimination; Groups: Norms, Roles, Status & Cohesiveness.	7
VII	Group Influence: Social Facilitation; Social Loafing; and Deindividuation.	7
VIII	Applying Social Psychology to Health, Law and Environment: Health Attitude and Health, Stress and Health; Eyewitness Identification and Testimony, Factors that affect Juror Decision Making; Human Environmental Relationship, Environmental Stress: Types and Characteristics.	8

Suggested Readings:

1. Baron, R.A. & Branscombe, N.R. (2012). *Social Psychology* (13th ed.) New Delhi: Pearson.
2. Baron, R.A., Byrne, D. & Bhardwaj, G. (2010). *Social Psychology* (12thed). New Delhi: Pearson.
3. Baumeister, R.F. & Bushman, B.J.(2013). *Social Psychology and Human Nature*. (3rd ed.). Wadsworth Pub. Co.
4. सिंह ,अरुण कुमार (2001). सामाजिक मनोविज्ञान। वाराणसी: मोतीलाल बनारसीदास।
5. Taylor, S.E., Paplau, L.A., & Sears, D.O. (2006). *Social Psychology* (12thed). New Delhi: Pearson Publications.
6. त्रिपाठी, एल ० बी ० एवं सहयोगी (2001). आधुनिक सामाजिक मनोविज्ञान।आगरा: हरप्रसाद भार्गव।
7. Suggestive digital platforms web links- <http://heecontent.upsdc.gov.in/Home.aspx>
<http://www.apa.org>
<http://www.yale.edu>

This course can be opted as an elective: Open to all

Suggested Continuous Evaluation Methods: <ul style="list-style-type: none"> • Assignment/ Seminar/ Research Orientation of Students (10 Marks) • Written Test (10 Marks) • Attendance (5 Marks)
Course prerequisites: Open to All
Suggested equivalent online courses: <ul style="list-style-type: none"> • Coursera, • Swayam

Paper 2

Practical

Program/Class: Diploma	Year: Second	Semester: Third
Subject: Psychology		
Course Code: A090302P	Course Title: Lab Work and Measurement of Social Behavior	
<p>Course Outcome: Students will be exposed to the mixture of skills such as how to conduct a psychological experiment for understanding social behavior as well as psychological measurements and scientific reporting of the data.</p>		
Credits: 2	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 10+25	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 0-0-2		
Unit	Topics	No. of Lectures
I	Measurement of Attitude/ Interpersonal Attraction	08
II	Measurement of Helping Behavior/ Prejudice	08
III	Conduct an experiment or test on Attribution/Aggression/ Impression Formation	07
IV	Conduct an experiment on Social Facilitation/ Conformity/ Compliance	07

Suggested Readings:
1. Suggestive digital platforms web links- http://heecontent.upsdc.gov.in/Home.aspx www.psytoolkit.org
This course can be opted by the students who took Psychology as a subject.
Suggested Continuous Evaluation Methods:
<ul style="list-style-type: none"> • Presentation of Practical file (15 Marks); • Attendance (10 marks)
Course prerequisites: Only to Psychology Students

Semester IV

Paper 1

Theory

Program/Class: Diploma	Year: Second	Semester: Four
Subject: Psychology		
Course Code: A090401T	Course Title: Abnormal Psychology	
Course Outcome: The students will be able to understand criteria of abnormality and one's own behavior and behavior of others. By applying the knowledge of assessment, diagnosis, classification system and DSM categories, the learners' will develop the sensitivity towards individual diversity and various approaches to the diagnosis and treatment of psychological disorders. Summarize clinical features of symptoms, etiology and valid and reliable treatment of diagnostic categories of mental health disorders.		
Credits: 4	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 10+25	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures

I	Abnormal Psychology: Concepts and Criteria of Abnormality, Classification of Abnormality (DSM V & ICD-11), Major Approaches to Abnormal Behavior.	6
II	Anxiety Disorders: Types (Generalized Anxiety Disorder, Phobia, Panic Disorder, Obsessive-Compulsive Disorder and Posttraumatic Stress Disorder), Clinical Picture, Etiology and Treatment.	8
III	Somatic and Dissociative Disorders: Somatic Symptom and Related Disorders, Dissociative Disorders- Types, Clinical Picture, Etiology and Treatment.	8
IV	Depressive and Bipolar Disorders: Types, Clinical Picture, Etiology and Treatment.	8
V	Schizophrenia: History, Types, Clinical Picture, Etiology and Treatment.	7
VI	Major and Mild Neurocognitive Disorders: Etiology, Clinical Picture and Treatment.	7
VII	Substance Related Disorder and other Addictive Disorders: Substance Abuse and Dependence; Alcohol, Nicotine, Marijuana, Sedatives and Stimulants: Etiology and Treatment.	8
VIII	Neurodevelopmental Disorders: Tics and Tourette's Disorder, Attention- Deficit/Hyperactivity Disorder, Autism Spectrum Disorders, Intellectual Disability, Learning Disorders: Clinical Picture, Etiology and Treatment.	8

Suggested Readings:

1. American Psychiatrist Association (2013). *Diagnostic and Statistical Manual of Mental Disorders- DSM -5* (5th ed.). APA: Washington DC.
2. Barlow D. H. & Durand V. M, & Stewart, S. H. (2009). *Abnormal Psychology*. New Delhi: Cengage Learning.
3. Bennett, P. (2006). *Abnormal and Clinical Psychology: An introductory textbook*. New York: Open University Press.
4. Brewer, K. (2001). *Clinical Psychology*. Oxford: Heinemann Educational Publishers.
5. Carson, R.C., Butcher, J.N., Mineka, S. & Hooley, J.M. (2008). *Abnormal Psychology*. New Delhi: Pearson.
6. Comer, R. J. & Comer, J. S. (2018). *Abnormal Psychology* (10th ed.). New York: Worth Publishers.
7. Kearney, C. A. & Trull, T. J. (2012). *Abnormal Psychology and Life: A dimensional approach*. New Delhi: Cengage learning.
8. Suggestive digital platforms web links- <http://heecontent.upsdc.gov.in/Home.aspx>
<http://www.apa.org>
www.nimh.nih.gov

This course can be opted as an elective: Open to all
Suggested Continuous Evaluation Methods: <ul style="list-style-type: none"> • Assignment/ Seminar/ Research Orientation of Students (10 Marks) • Written Test (10 Marks) • Attendance (5 Marks)
Course prerequisites: Open to All
Suggested equivalent online courses: <ul style="list-style-type: none"> • Coursera; • Swayam

Paper 2

Practical

Program/Class: Diploma	Year: Second	Semester: Four
Subject: Psychology		
Course Code: A090402P	Course Title: Screening and Assessment	
Course Outcome: At the end of the course, the students will be imparted a variety of proficiency to conduct the screening and assessment of psychological tools for examining developmental issues and disorders. The practicum of case study will let the students learn and execute an indepth investigation of a single person, group, event or community.		
Credits: 2	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 10+25	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 0-0-2		
Unit	Topics	No. of Lectures
I	Assessment and report of any one anxiety disorder based on psychological test	08

II	Assessment and report of depression based on psychological test	08
III	Case Study/ Screening of any Intellectual Disability/ Attention Deficit Hyperactivity Disorder and report	07
IV	Case Study/ Screening of any Learning Disability/ Autism Spectrum Disorder and report	07
Suggested Readings:		
1. Suggestive digital platforms web links- http://heecontent.upsdc.gov.in/Home.aspx http://www.apa.org		
This course can be opted by the students who took psychology as a subject		
Suggested Continuous Evaluation Methods:		
<ul style="list-style-type: none"> • Presentation of Practical file (15 marks) • Attendance (10 marks) 		
Course prerequisites: Only for psychology students		

Semester V

Paper 1

Theory

Program/Class: Degree	Year: Third	Semester: Five
Subject: Psychology		
Course Code: A090501T	Course Title: Human Development	
Course Outcome: At the end of the course, the student will able to develop an ability to identify the milestones in diverse domains of human developments across the child, adolescent and adulthood stages, understand the contributions of socio-cultural context toward shaping human development and acquire an ability to decipher key developmental challenges and issues.		

Credits: 4		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks: 10+25
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Introduction to Human Development: Concepts of Growth and Maturation; Developmental Stages; Principles of Development; Methods of Studying Human Development.	8
II	Prenatal Development: Stages and hazards; Neonatal Development: Sensory and Motor Capacity.	8
III	Infancy: Physical Development, Social and Language Development.	7
IV	Childhood Development: Cognitive, Social, Emotional and Moral Development.	8
V	Adolescence Development: Physical Changes (Puberty and Growth spurts); Psychological changes- Development of Identity, Cognitive, Social, Emotional and Moral Development.	8
VI	Early Adulthood: Physical, Cognitive and Psycho-social Development.	7
VII	Middle Adulthood: Physical, Cognitive and Psycho-social Development.	7
VIII	Late Adulthood: Physical, Cognitive and Psycho-social Development.	7
Suggested Readings:		
<ol style="list-style-type: none"> 1. Berk, L. E. (2010). <i>Child Development</i> (9th ed.). New Delhi: Prentice Hall. 2. Berk, L.E. (2017). <i>Development through the Life span</i> (7th ed.). Allyn & Bacon: Perason. 3. Feldman, R.S. & Babu. N. (2011). <i>Discovering the Lifespan</i>. New Delhi: Pearson. 4. Misra, G. (2011). <i>Handbook of Psychology in India</i> (Section IV), New Delhi: Oxford University Press. 5. Santrock, J. W. (2011). <i>Child Development</i> (13th ed.). New Delhi: McGraw-Hill. 6. Santrock, J.W. (2012). <i>Life Span Development</i> (13th ed.). New Delhi: McGraw-Hill. 		

<p>7. Srivastava, A.K. (1997). <i>Child Development: An Indian Perspective</i>. New Delhi: NCERT.</p> <p>8. त्रिपाठी, एल० बी० एवं पाण्डेय , एस० (2009). मानव विकास का मनोविज्ञान। नई दिल्ली: कांसेप्ट पब्लिशिंग कंपनी।</p> <p>9. Suggestive digital platforms web links- http://heecontent.upsdc.gov.in/Home.aspx http://www.apa.org</p>
This course can be opted as an elective: Open to all
<p>Suggested Continuous Evaluation Methods:</p> <ul style="list-style-type: none"> • Assignment/ Seminar/ Research Orientation of Students (10 Marks) • Written Test (10 Marks) • Attendance (5 Marks)
Course prerequisites: Open to All
<p>Suggested equivalent online courses:</p> <ul style="list-style-type: none"> • Coursera, • Swayam

Paper 2

Theory

Program/Class: Degree	Year: Third	Semester: Five
Subject: Psychology		
Course Code: A090502T	Course Title: Positive Psychology	
<p>Course Outcome: By the end of the course, the students will be able to understand the basic principles of positive psychology, the major areas within positive psychology that have received a considerable amount of attention, the use of positive psychology tools and techniques in own and in other's life. It will also ease the understanding of positive aspects of human behavior</p>		

through the wisdom embedded in Indian scriptures like Vedas, Upnishadas, Shrimad Bhagvad Gita, Buddhist literature and folk tales.		
Credits: 4		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks: 10+25
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Positive Psychology: Historical roots; Assumptions and Goals; Eastern and Western Perspectives on Positive Psychology.	7
II	Positive Emotional State: The Broaden and Build Theory of Positive Emotions; Wellbeing and Happiness: Eudemonics and Hedonistic View; Psychological and Subjective Wellbeing; Flow: Flow State, Auto telic Personality. Concept and Mindfulness in Buddhism.	8
III	Positive Cognitive States: Self Efficacy (आत्मप्रभावोत्पादकता): Concept , measurement ; Hope and Resilience (आशा या उम्मीद एवं समउत्थानशीलता) : Concept, Childhood antecedents, measurements; Wisdom and Courage (प्रज्ञा एवं साहस) : Difference between intelligence and wisdom, Theories of wisdom and courage, measurement ; Positive Thinking (सकारात्मक चिंतन) : Concept of Optimism (आशावादिता) measurement and Health related outcomes.	8
IV	Prosocial Behaviour: Forgiveness (क्षमा) : Definition, Cultivation exercises, measurement, benefits, Buddhist view on forgiveness. Empathy and Compassion (तदनुभूति एवं सहृदयता) : Definition, empathy – egotism hypothesis; Gratitude (कृतज्ञता) : Concept, Cultivation exercises in Positive Psychology.	8
V	Personal Competence: Self –awareness (आत्मज्ञान) : SWOT Analysis Techniques to enhance self- awareness ; Self-regulation (आत्म नियमन) : Concept and strategies related to self-regulation.	7

VI	Social Competence: The Value of Social Support and Relationships in a Fulfilling and Meaningful Life; Love and belongingness.	8
VII	Application of Positive Psychology in Counseling: Model of Mental Health: Flourishing, Languishing, Floundering and Struggling Character Strength Based Counseling.	7
VIII	Positive Psychology in School: Positive Education through The PERMA model of human flourishing & VIA Character Strengths.	7

Suggested Readings:

- 1- Baumgardner, S.R. & Crothers, M.K. (2009). *Positive Psychology*. Pearson.
- 2- Carr, A. (2004). *Positive Psychology: The Science of Happiness and Human Strength* U.K.: Routledge.
- 3- Gilman, R., Hubner, E. & Furlong, M.J. (Eds.) (2009). *Handbook of Positive Psychology in Schools*. New York: Routledge.
- 4- Lyubomirsky, Sonja. (2008). *The How of Happiness: A Scientific Approach to Getting the Life You Want*. The Penguin Press.
- 5- Noddings, N (2003). *Happiness in Education*, New York, Cambridge Press.
- 6- Peterson, C. (2006). *A Primer in Positive Psychology*. New York: Oxford University Press.
- 7- Synder, C.R. & Lopaz, S.J. (2011). *Positive Psychology: The Scientific and practical exploration of Human Strengths*. Thousand Oaks, CA: Sage.
- 8- Synder, C. R. & Shane, J.L. (2005). *Handbook of Positive Psychology*. Oxford University Press.

Suggestive digital platforms web links- <http://heecontent.upsdc.gov.in/Home.aspx>

<http://www.apa.org>

This course can be opted as an elective: Open to all

Suggested Continuous Evaluation Methods:

- Assignment/ Seminar (10 Marks),
- Written Test (10 Marks)

<ul style="list-style-type: none"> Attendance (5 Marks)
Course prerequisites: Open to All
<p>Suggested equivalent online courses:</p> <ul style="list-style-type: none"> Coursera, Swayam

Paper 3

Practical

Program/Class: Degree	Year: Third	Semester: Five
Subject: Psychology		
Course Code: A090503P	Course Title: Lab Work/Survey/ Field Visit	
Course Outcome: After completing this practicum, the student will have an understanding about how to frame research objectives and questions, plan, decide and execute appropriate methods of research, data analysis, interpretation and discussion of the findings.		
Credits: 2	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 10+25	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 0-0-2		
Unit	Topics	No. of Lectures
I	Write a Journal (Diary).For Example a Gratitude or Forgiveness Journal or any other of your choice by recording your entries at least 2-3 times a week and report your Reflection like any thoughts and feelings that may arise as you become aware of that. What benefits could you gain from developing this habit of mind, short and long	10

	term? Be aware of any shifts from stress/anxiety to enhanced wellbeing and calm.	
II	Conduct a survey research. For Example; meaning of life/happiness index/positive and Negative Affect/life satisfaction/optimism/ well-being etc. (10- 12 students group can be formed)	10
III	Conduct a field study on anyone topic of human development/positive schooling, analyze the data and report (10-12 student groups can be formed)	10
Suggested Readings:		
1. Suggestive digital platforms web links- http://heecontent.upsdc.gov.in/Home.aspx http://www.apa.org		
This course can be opted by the students who took psychology as a subject		
Suggested Continuous Evaluation Methods:		
<ul style="list-style-type: none"> • Presentation of Practical file (20 Marks) • Attendance (5 Marks) 		
Course prerequisites: Only for psychology students		

Paper 4

Research Project

Program/Class: Degree	Year: Third	Semester: Five
Subject: Psychology		
Course Code: A0905 04R	Course Title: Problem Identification & Research Proposal Writing	

Course Outcome: After completing this practicum, the student will have a comprehensive understanding about carrying out research project, how to frame research objectives and questions, plan, decide and execute appropriate methods of research, and intended data analysis.		
Credits: 3		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks:
Total No. of Lectures		
Unit	Topics	No. of Lectures
I	Visit of any community of the surrounding and identification of problems, issues, good practices, skills, community services etc. For example- Health Services, Women Self Help Groups, NGOs, Banks, Organizations, Industries, Villages, Panchayat etc. (10-12 students group can be formed)	20
II	Based on the field visit observations and experiences, each student will write a research proposal in this semester. The research proposal is an important process in providing a clear statement of the problem, a review of literature, how the literature relates to the proposed study, formal research questions and hypotheses, a full methods section, and the data analysis you intend to conduct. The student will work in groups in completing the project, but will write the proposal and final paper individually. Each student will be evaluated on diligence in writing the research proposal as per APA guidelines.	25
Suggested Readings:		
2. Suggestive digital platforms web links- http://heecontent.upsdc.gov.in/Home.aspx http://www.apa.org		
This course can be opted by the students who took psychology as a subject		

<p>Suggested Continuous Evaluation Methods:</p> <ul style="list-style-type: none"> • PPT Presentation of experiences of observed unit and research proposal (20 Marks) • Attendance (5 Marks)
<p>Course prerequisites: Only for psychology students</p>

Semester VI

Paper 1

Theory

Program/Class: Degree	Year: Third	Semester: Six
Subject: Psychology		
Course Code: A090601T	Course Title: Community and Health Psychology	
<p>Course Outcome: At the end of the course the student will be able to recognize that individuals relate to their communities and the reciprocal effect of communities on individuals and will be able to understand and resolve community issues, analyze the data, and recommend interventions that promote community wellness. Moreover, they will able to use the psychological theories on health-related practices and will able to examine persons’ health history and describe and enact a positive, proactive attitude toward healthy living for oneself and others.</p>		
Credits: 4	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 10+25	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures

I	Community Psychology: Nature of Community Psychology; Historical Development of Community Psychology; Fields of Community Psychology.	7
II	Approaches of Community Psychology: Mental Health approach; Social Problems approach.	8
III	Some Community Intervention Issues: Poverty and Prolonged Deprivation; Marginalization; Migration & Immigration issues; Population and Disadvantaged Children & Family; Superstitions in Indian society; Peace and social harmony.	8
IV	Community Interventions: Prevention: Primary, Secondary and Tertiary; Community Mental Health; Gender, Discrimination and Power Issues related interventions; School Intervention; Sector Intervention; Rural development Intervention.	7
V	Health Psychology: Nature, Development and Goals of Health Psychology; Biopsychosocial Model of Health.	6
VI	Health Behavior: Health Compromising and Health Enhancing Behaviors; Theories of Health Behavior: Health Belief Model, Protection Motivation Theory, Planned Behavior and Reasoned Action Theory and Modeling.	8
VII	Stress and Health: Nature and Types of Stress, Stress appraisal; Coping with Stress; Psychological Moderators of Stress.	8
VIII	Chronic Illnesses: Coronary Heart Disease, Diabetes, Cancer and AIDS: Nature, Etiology and Psychological correlates.	8

Suggested Readings:

1. Dalal, A.K. (2016). Cultural Psychology of Health in India: Well-being, Medicine and Traditional Health Care. New Delhi: Sage Publications India Pvt. Ltd.
2. Dalal, A.K. (2015). Health Beliefs and Coping with Chronic Diseases. New Delhi: Sage Publications India Pvt. Ltd.
3. Ghosh, Manika (2015). *Health Psychology: Concepts in Health and Well-being*. New Delhi: Pearson.
4. Kloos, B., Hill, J., Thomas, E., Wandersman, Elias, M. J., & Dalton, J.H. (2012). *Community Psychology: Linking Individuals and Communities*. Wadsworth, Cengage Learning.
5. Korchin. S.J. (2004). Modern clinical psychology. Delhi: CBS Publishers and Distributors.

<p>6. Marks, D. F. Murray, M. Evans, B. & Willing, C. (2000). <i>Health Psychology: Theoretical, Research and Application</i>. New Delhi: Concept.</p> <p>7. Misra, G. (1999). <i>Psychological perspectives on stress and health</i>, New Delhi: Concept Publishing Company.</p> <p>8. Rappaport, J. (1977): <i>Community Psychology: Value Research and Application</i>. New York: Holt, Rinehart and Winston.</p> <p>9. Schneider, F.W., Gruman, A., Coult, L.M. (Eds.). (2012). <i>Applied Social Psychology: Understanding and addressing Social and Practical Problems</i>. New Delhi: Sage publication.</p> <p>10. Sarafino, E.P. & Smith, T.W. (2012). <i>Health Psychology: Biopsychosocial Interaction</i>. (7th ed.). U.K.: John Wiley & Sons.</p> <p>11. Taylor, S.E. (2013). <i>Health Psychology</i>. New Delhi: McGraw-Hill Education Pvt. Ltd.</p> <p>12. Suggestive digital platforms web links- http://heecontent.upsdc.gov.in/Home.aspx http://www.apa.org</p>
<p>This course can be opted as an elective: Open to all</p>
<p>Suggested Continuous Evaluation Methods:</p> <ul style="list-style-type: none"> • Assignment/ Seminar (10 Marks) • Written Test (10 Marks) • Attendance (5 Marks)
<p>Course prerequisites: Open to All</p>
<p>Suggested equivalent online courses:</p> <ul style="list-style-type: none"> • Coursera • Swayam

Paper 2**Theory**

Program/Class: Degree	Year: Third	Semester: Six
Subject: Psychology		
Course Code: A090602T	Course Title: Counseling Psychology	
Course Outcome: At the end of the paper, students will able to understand how to establish rapport and use various approaches in counseling.		
Credits: 4	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 10+25	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Counseling: Meaning, Purpose and Goals; Types of Counseling: An Overview.	7
II	Theoretical Bases of Counseling: Psychoanalytic; Humanistic; Cognitive-Behavioral and Indian Contribution to Counseling Theories and Techniques.	8
III	Counseling Processes: Rapport Building and History Taking; Counseling Interview, Phases of Counseling; Counseling Micro Skills: Attending, Paraphrasing, Encouragers, Confronting and Summarizing.	7
IV	Counseling Approaches: Techniques: Psychoanalytic, Person-Centered and Cognitive- Behavioral (Beck and Albert Ellis).	8
V	Child & Adolescents Counseling; Counseling in Schools; Family Counseling.	7
VI	Career, Marriage and Group Counseling.	8
VII	Counseling for Substance-abuse, Internet and Gaming Addiction, Child Abuse, Behavioral and Adjustment Issues and Crises Management (Suicide and Disaster).	8
VIII	Professional Issues and Counseling Ethics; Referrals and Reporting	7

Suggested Readings:

1. Edward, N. (2011). *Counseling Theory and Practice*. Cengage Learning.
2. Gelso, C. J. & Pretz, B.R. (1995). *Counseling Psychology*. Bangalore: Prism Books Pvt. Ltd.
3. Gibson, R. L. & Mitchell, M.H. (2005). *Introduction to Counseling and Guidance* (6th Ed.) Pearson Education.
4. Kapur, Malavika (2011). *Counseling Children with Psychological Problems*. Pearson Publications.
5. Nelson-Jones, R. (2011). *Theory and Practice of Counseling & Therapy*. New Delhi: Sage South Asia Edition.
6. Patri, V. R. (2008). *Counseling Psychology*. New Delhi: Authors Press.
7. राय, ए० एवं अस्थाना, एम०(2003).आधुनिक परामर्शन मनोविज्ञान. नई दिल्ली: मोतीलाल बनारसीदास।
8. Rao, S. N. (1991). *Counseling and Guidance*. New Delhi: Tata McGraw-Hill.
9. Woolfe, R., Dryden, W. & Strawbridge, S. (2003). *Handbook of Counseling Psychology* (2nded.). London: Sage Publication Ltd.

This course can be opted as an elective: Open to all

Suggested Continuous Evaluation Methods:

- Assignment/ Seminar/ Research Orientation of Students (10 Marks)
- Written Test (10 Marks)
- Attendance (5 Marks)

Course prerequisites: Open to All

Suggested equivalent online courses:

- Coursera,
- Swayam

Paper 3**Practical**

Program/Class: Degree	Year: Third	Semester: Six
Subject: Psychology		
Course Code: A090603R	Course Title: Survey/Field Visit	
Course Outcome: After completing this practicum, the student will have an understanding about how to frame research objectives and questions, plan, decide and execute appropriate methods of research, data analysis, interpretation and discussion of the findings.		
Credits: 2	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 10+25	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 0-0-2		
Unit	Topics	No. of Lectures
I	Field Visit to any Community Center/Social Service Center/ School and submit a report (10-12 students group can be formed)	15
II	Conduct a survey on any Health Related issues and submit the report(10-12 students group can be formed)	15
This course can be opted by the students who took psychology as a subject		
Suggested Continuous Evaluation Methods: <ul style="list-style-type: none"> • Presentation of Practical file (20 Marks) • Attendance (5 Marks) 		
Course prerequisites: Open to All		

Paper 4**Research Project**

Program/Class: Degree	Year: Third	Semester: Six
Subject: Psychology		
Course Code: A090604R	Course Title: Research Project	
Course Outcome: It will help the learner to critically reflect on, review the scientific basis for, and integrate what you have learned and accomplished as a psychology student and will prepare to explore the cultural, social, and ethical impact of psychological application on community and daily life.		
Credits: 3	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks:	
Total No. of Lectures		
Unit	Topics	No. of Lectures
I	Based on the field visit observations and experiences, the learner get in Semester V, plan to visit to identified unit, organization, community etc. to get an understanding of the same and do data collection either through questionnaire, or interview or with the help of audio-visual medium based on the identified research problems/issues.	25
	Analyze the data and submit a detailed report and a presentation. The student will work in groups in completing the project, but will write the final paper individually. Each student will be evaluated on diligence in writing the research project as per APA guidelines.	20
Suggested Readings:		
1. Suggestive digital platforms web links- http://heecontent.upsdc.gov.in/Home.aspx http://www.apa.org		

This course can be opted by the students who took psychology as a subject
Suggested Continuous Evaluation Methods: <ul style="list-style-type: none"> • Making of short film or presentation of observed unit (20 Marks) • Attendance (5 Marks)
Course prerequisites: Only for psychology students

In reference to Common Minimum Syllabus under NEP -2020 a virtual meeting (On Zoom) of Board of Studies, Psychology is held today on 15/ 05/2021. In the virtual meeting the following teachers participated:

Dr. Suneel Chaudhary **Dr. Alpana Agarwal** **Dr. Seema Gupta** **Dr. Meenu Vishnoi**
Convener External Expert Member Member

Shri Nikhil Kumar Das **Shri Sunil Kumar** **Dr. Karuna Anand**
Member Member Member

Dr. Sandaya Saxena, also participated in the meeting as Member, Coordination Committee, MJPRU, Bareilly.

Proceedings:

It is unanimously resolved to implement the new revised syllabus of B.A. – Psychology from the Session 2021-22.

The Common Minimum Syllabus of Psychology is unanimously accepted with the following minor modifications:

1. In **Semester I**, Paper 1 –Theory (Foundations of Psychology), in Unit –III (Learning), Cognitive Learning Theories: Tolman’s Latent Learning, Köhler’s Insight Learning, Bandura’s Observational Learning is added. In Unit–IV (Memory

and Forgetting), Methods of Measuring Memory and Techniques of Improving Memory is added. In Unit –VIII (Emotion), Lazarus theory of emotion is added.

2. In **Semester II**, Paper 1 –Theory (Methodology and Statistics), in Unit –VII (Psychological Statistics), Frequency Distribution and their Graphical Presentation: Frequency polygon, Bar Diagram, Histograms and Ogive is added.
3. In **Semester III**, Paper 1 –Theory (Psychology of Social Behavior), in Unit –IV (Attitude), Measurement of Attitude and Attitude Change is added.
4. In **Semester III**, Paper 2 – Practical (Lab Work and Measurement of Social Behavior) in Unit –III, Option of psychological test is added for measurement of Attribution/Aggression/ Impression Formation.
5. In **Semester IV**, Paper 1 – Theory (Abnormal Psychology) in Unit – I to VIII, Treatment is added. In Unit–I (Abnormal Psychology), ICD-11 is added in Classification of Abnormality. In Unit–II (Anxiety Disorders), Posttraumatic Stress Disorder is added.
6. In **Semester IV**, Paper 2 – Practical (Screening and Assessment) in Unit – I, Assessment and report of any one anxiety disorder is modified as Assessment and report of any one anxiety disorder based on psychological test. In Unit – II, Assessment and report of depressive / bipolar disorders is modified as Assessment and report of depression based on psychological test.
7. In **Semester VI**, Paper 1 – Theory (Community and Health Psychology), in Unit – IV (Community Interventions), Prevention: Primary, Secondary and Tertiary is added. In Unit–VIII (Chronic Illnesses), AIDS is added.
8. In **Semester VI**, Paper 2 – Theory (Counseling Psychology), in Unit –VII (Counseling), Internet and Gaming Addiction and Crises Management (Suicide and Disaster) is added.
9. In the revised syllabus suggested readings is revised whereas required.