

**University of Management and Technology**

**Course Outline**

**Course code:** CP641

**Course title:** Statistics in Clinical Psychology

Program	MS Clinical Psychology
Credit Hours	3
Duration	15 Weeks
Prerequisites	The participants must have basic understanding of research process and quantitative methods used in Clinical Psychology research
Resource Person	Dr. Sadia Saleem, Acting Dean, Associate Professor Dr. Sara Subhan, Acting Chairperson, Assistant Profe
Counseling Timing (Room# Office at Level 5 Library Building)	1:00 pm – 2:00 pm
Contact	<a href="mailto:sadia.saleem@umt.edu.pk">sadia.saleem@umt.edu.pk</a> & <a href="mailto:sara.subhan@umt.edu.pk">sara.subhan@umt.edu.pk</a>

**Chairman/Director signature.....**

**Dean's signature.....**

**Date.....**

### **Learning Objective:**

- The purpose of this course is to give exposure and in-depth understanding to the statistical procedures used to analyze and interpret data.
- The major focus of this course is to give knowledge about the basic assumptions and pre-requisites to carry out statistical analyses.
- This course will also help participants to report the results according to APA VII.

### **Learning Methodology:**

Teaching this course will be only part time dyadic and mainly practice and skills oriented. It will include lectures on theoretical issues and regular workshops for effective learning. Teaching would be more discussion oriented, so that trainees become reflective practitioners rather than mere recipients of knowledge. Trainees will also be required to give class presentations and submit written reports on regular basis. Teachers will provide handouts and relevant reading material on regular basis. Following are the few teaching methodologies used in the class:

- Class room lectures
- Seminars
- Presentation
- Group projects
- Assignments
- Quiz
- Practice Sessions
- Discussion Forum

## **Grade Evaluation Criteria**

Following is the criteria for the distribution of marks to evaluate final grade in a semester.

<b>Marks Evaluation</b>	<b>Marks in percentage</b>
Quizzes	20
Assignments	10
Presentations	20
Attendance & Class Participation	10
Final exam	40
Total	100

**Note.** *Quizzes, assignments, presentation and class participation is considered as Mid-term.*

## **Recommended Text Books:**

1. Pallant, J. (2010). SPSS survival manual. 4<sup>th</sup> Edition. Open university Press.
2. Field, A. (2009). Discovering Statistics Using SPSS. Sage Publishing Company.
3. Steele, C., Andrews, H., & Upton, D. (2012). Statistics in Psychology. Pearson Education Limited.
4. Cramer, D & Howitt, D. (2017). Understanding Statistics in Psychology with SPSS. (7<sup>th</sup> Edition). Pearson Publishing House
5. Hayes, A. F. (2017). Introduction to Mediation, Moderation and Conditional Process Analysis: A Regression-based Approach (2<sup>nd</sup> Edition)

## **Reference Books:**

1. Carver, R.H., & Nash, J.G. (2012). Doing Data analysis with SPSS Version 18. Melbourne: Cengage Learning.
2. Brace, N., Kemp, R., & Snelgar, R. (2006). SPSS for psychologists. London Lawrence Erlbaum Association.

**Calendar of Course contents to be covered during semester**

Course code: CP-641

Course title: Statistics in Clinical Psychology

Week	Course Contents	Reference Chapter(s)
1.	Introduction to Statistics and SPSS	<b>Chapter 2 &amp; 4</b> Pallant, J. (2010). SPSS survival manual.
2.	Descriptive Analysis	<b>Chapter 6 &amp; 7</b> Pallant, J. (2010). SPSS survival manual. <b>Chapter 2, 3 &amp; 4</b> Cramer, D & Howitt, D. (2017). Understanding Statistics in Psychology with SPSS.
3.	Inferential Analysis – Test of Association <i>Correlation Analysis</i>	<b>Chapter 11</b> Pallant, J. (2010). SPSS survival manual. <b>Chapter 6</b> Field, A. (2009). Discovering Statistics Using SPSS.
4.	Inferential Analysis – Test of Association <i>Factor Analysis – I</i>	<b>Chapter 15</b> Pallant, J. (2010). SPSS survival manual. <b>Chapter 33</b> Cramer, D & Howitt, D. (2017). Understanding Statistics in Psychology with SPSS.
5.	Inferential Analysis – Test of Association <i>Factor Analysis – II</i>	<b>Chapter 15</b> Pallant, J. (2010). SPSS survival manual. <b>Chapter 33</b> Cramer, D & Howitt, D. (2017). Understanding Statistics in Psychology with SPSS.
6.	Inferential Analysis – Test of Association <i>Regression Analysis</i>	<b>Chapter 13 &amp; 14</b> Pallant, J. (2010). SPSS survival manual. <b>Chapter 7</b> Field, A. (2009). Discovering Statistics Using SPSS.
7.	<b>Presentations</b>	
8.	<b>Presentations</b>	
9.	Inferential Analysis – Test of Difference <i>t-test Analysis</i>	<b>Chapter 17</b> Pallant, J. (2010). SPSS survival manual. <b>Chapter 9</b> Field, A. (2009). Discovering Statistics Using SPSS.
10.	Inferential Analysis – Test of Difference <i>One Way Analysis of Variance</i>	<b>Chapter 18</b> Pallant, J. (2010). SPSS survival manual. <b>Chapter 10</b> Field, A. (2009). Discovering Statistics Using SPSS.
11.	Non-parametric Statistics <i>Mann – Whitney U Test, Wilcoxon Signed Rank Test, Kruskal-Wallis Test &amp; Friedman Test</i>	<b>Chapter 16</b> Pallant, J. (2010). SPSS survival manual.

12.	Mediation Analysis	Hayes, A. F. (2017). Introduction to Mediation, Moderation and Conditional Process Analysis: A Regression-based Approach (2 <sup>nd</sup> Edition)
13.	Moderation Analysis	Hayes, A. F. (2017). Introduction to Mediation, Moderation and Conditional Process Analysis: A Regression-based Approach (2 <sup>nd</sup> Edition)
14.	Ethics in Statistics	
15.	Review & Feedback of the Course	