

IM Capacity Strengthening – Training Program

Syllabus Agenda

Description

Online courses that provide a general introduction to information management. These are designed for humanitarian IM Officers, M&E Officers/Managers, and Program Officers/Managers who either are in a decision-making position or provide decision-support about what kind of programming to advocate for and implement.

Language

English

Registration Link

<https://ee.humanitarianresponse.info/x/ZaJWdRTd>

Course 1 – Data Collection (1 working day, Date: 4th of Sep, 9:00 am – 4:00 pm)

Objectives

- Introduce the different data types, as well as compare & contrast qualitative, quantitative, and mixed research methods
- Outline considerations for designing a questionnaire, including structure, length, data collection techniques, question categories & types and ground rules, as well as how to develop a data analysis plan
- Learn how to determine Sample Sizes for the data collection
- Learn the use of available tools for different data collection purposes
- Describe & practice how to use KoBo tool to build the questionnaire form, test it and extract the data
- Introduce building mobile data collection forms using XLS forms in MS Excel
- Explain how to build multi-language forms, setting up question appearance, adding answer constraints & relevancy rules

Subject	Time
Quick Introduction Defining the course objectives	9:00 am – 9:10 am
Introduction to research methods & Questionnaire Design	9:10 am – 11:00 am
Break	11:00 am – 11:15 am
Introduction to KoBo	11:15 am – 1:00 pm
Break (Lunch)	1:00 pm – 2:00 pm
Introduction to XLSFORMS	2:00 pm – 4:00 pm

Course 2 – Data Management (1 working day, Date: 11^h of Sep, 9:00 am – 4:00 pm)

Objectives

- Define Data cleaning
- Steps to validate and clean data
 - a) Explain concatenated functions, logical values/operators & formulas
 - b) Introduce AND or NOT functions (AND function, IF with AND function, OR NOT function, complex nested function cells, ignoring numbers in calculations)
 - c) Explain lookup functions (VLOOKUP and INDEX- MATCH)
- Using Excel Power Query to prepare data
 - a) Describe the steps to use to power query features
 - b) Explain the Pivot tables for data preparation
- How to measure data quality
 - a) Find patterns and trends
 - b) Find data outliers and how to handle it
 - c) How statistics can help
- Analyzing data using Excel
 - a) Create charts & graphs

Subject	Time
Quick Introduction Defining the course objectives	9:00 am – 9:10 am
Introduction to Data cleaning	9:10 am – 11:00 am
Break	11:00 am – 11:15 am
Introduction to Excel formulas and functions	11:15 am – 1:00 pm
Break (Lunch)	1:00 pm – 2:00 pm
Introduction to Power Query	2:00 pm – 4:00 pm

Course 3 – Data Mapping – QGIS (1 working day, Date: 18th of Sep, 9:00 am – 4:30 pm)

Objectives

- Introduce GIS to include definition of a coordinate system, as well as comparing/contrast of geographic versus a projected coordinate system
- Explain different types of GIS data models to include raster and vector models, their properties, advantages/disadvantages and how to translate them to the real world
- Create maps and export them to different applications

Please make sure to download QGIS at this link: <https://qgis.org/downloads/QGIS-OSGeo4W-3.26.1-2.msi>

Subject	Time
Quick Introduction Defining the course objectives	9:00 am – 9:10 am
Introduction to Data Mapping	9:10 am – 11:00 am
Break	11:00 am – 11:15 am
Introduction to QGIS	11:15 am – 1:00 pm
Break (Lunch)	1:00 pm – 2:00 pm
Creating Maps, layouts and exporting PDFs	2:00 pm – 4:30 pm

Course 4 – Data Visualization – Power BI (1 working day, Date: 25th of Sep, 9:00 am – 4:30 pm)

Objectives

- Share some considerations such as labels, legend, units, axes, and some effects
- Introduce and explain the concept of relational databases and their use for storing data
- Describe the concepts of database, primary and foreign keys, and joints
- Describe the use of Power BI in creating visualizations to summarize key findings in reports
- Describe steps required for preparing dataset for analysis in Power BI
- Creating simple dashboard and publishing to the cloud

Please make sure to download Power BI at this link: <https://www.microsoft.com/en-us/download/confirmation.aspx?id=58494>

Subject	Time
Quick Introduction Defining the course objectives	9:00 am – 9:10 am
Introduction to Data Visualization	9:10 am – 11:00 am
Break	11:00 am – 11:15 am
Introduction to Power BI	11:15 am – 1:00 pm
Break (Lunch)	1:00 pm – 2:00 pm
Creating basic dashboard on Power BI, and publishing data to the cloud	2:00 pm – 4:30 pm