

## Simplifying, Identifying, and Evaluating Dimensions: Exploratory and Confirmatory Factor Analysis

### Schedule

| <b>Monday</b>    |  |
|------------------|--|
| 10:00 – 11:30    | Introduction to factor analysis theoretical assumptions, principles  |
| 11:30 – 11:45    | Coffee Break   |
| 11:45 – 13:15    | Review of Basic Statistical Tools. Introduction to Data File for Guided Practice: Student Conceptions of Assessment v6   |
| 13:15 – 14:15    | Lunch  |
| 14:15 – 15:45    | Scale Analysis: Simplest approach to a single dimension; discussion of estimators<br>Practice: Import data (SCoA-VI) & Calculate Scale Reliabilities for the scales (JAMOVI) |
| 15:45 – 16:00    | Coffee Break   |
| 16:00 – 17:30    | Self-study   |
| <b>Tuesday</b>   |  |
| 10:00 – 11:30    | Exploratory Factor Analysis Principles: What makes a factor a factor   |
| 11:30 – 11:45    | Coffee Break   |
| 11:45 – 13:15    | Deciding on number of factors  |
| 13:15 – 14:15    | Lunch  |
| 14:15 – 15:45    | Demonstration & practice with SCoA data (JAMOVI)   |
| 15:45 – 16:00    | Coffee Break   |
| 16:00 – 17:30    | Self-study   |
| <b>Wednesday</b> |  |
| 10:00 – 11:30    | Confirmatory Factor Analysis Principles: What's Different to EFA   |
| 11:30 – 11:45    | Coffee Break   |
| 11:45 – 13:15    | Estimation & Fit   |
| 13:15 – 14:15    | Lunch  |
| 14:15 – 15:45    | Demonstration & practice with SCoA data (JAMOVI)   |
| 15:45 – 16:00    | Coffee Break   |
| 16:00 – 17:30    | Self-study   |
| 19:00 – 21:00    | Summer School Sight-Seeing Tour  |
| <b>Thursday</b>  |  |
| 10:00 – 11:30    | Troubleshooting Inadmissible & Problematic Solutions   |
| 11:30 – 11:45    | Coffee Break   |
| 11:45 – 13:15    | Alternative Model Structures   |

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| 13:15 – 14:15   | Lunch  |
| 14:15 – 15:45   | Demonstration & practice with SCoA data (JAMOVI; lavaan) |
| 15:45 – 16:00   | Coffee Break   |
| 16:00 – 17:30   | Self-study   |
| <b>Friday</b>   |  |
| 10:00 – 11:30   | Nested Invariance Testing                                |
| 11:30 – 11:45   | Coffee Break   |
| 11:45 – 13:15   | Latent Curve Analysis                                    |
| 13:15 – 14:15   | Lunch  |
| 14:15 – 15:45   | Demonstration & practice with SCoA data (lavaan)         |
| 15:45 – 16:00   | Coffee Break   |
| 16:00 – 17:30   | Self-study   |
| <b>Saturday</b> |  |
| 10:00 – 11:00   | Wrap-Up  |
| 11:00 – 11:15   | Coffee Break   |
| 11:15 – 12:00   | Feedback and certificates                                |