CRIME ANALYSIS & MODELING WITH CRIMESTAT IV

Course Outline

	DAY 1 **(starts at 9:00)**	**DAY 2** **(starts at 9:00)**
9:00-9:45	T1: **Basic Concepts in Geoinformation** (Spatially discrete vs continuous data, distance measurements, spatial autocorrelation, global vs local statistics, MAUP, edge effects, etc.)	T7: **Introduction to Hot Spot Analysis** (Not risk-adjusted and risk-adjusted hot spot analysis)
9:45-10:30	T2: **Introduction to CrimeStat IV** (Program requirements, installation, data input and result output, coordinate systems, etc.)	T8: **Hot Spot Analysis I** (Spatial mode, spatial fuzzy mode, nearest neighbor hierarchical clustering)
10:30-10:45	**BREAK**	**BREAK**
10:45-11:30	T3: **Introduction to Point Pattern Analysis (PPA)** (goal and components of PPA, complete spatial randomness, first and second order effects, historical development)	T9: **Hot Spot Analysis II** (Kernel density estimation, risk-adjusted hot spot analysis)
11:30-12:15	T4: **Spatial Descriptive Statistics** (Spatial mean, spatial medium, center of minimum distance, standard distance deviation, standard deviational ellipse)	T10: **Theories and Concepts in Criminal Geographic Profiling (CGP)** (Least effort principle, rational choice theory, routine activity theory, serial offender typology, etc.)
12:15-13:15	**LUNCH**	**LUNCH**
13:15-14:00	T5: **Hypothesis Testing and Statistical Significance**	T11: **CGP Models I** (Centrographic statistics, non-calibrated journey-to-crime estimation)
14:00-14:45	T6: **Spatial Distribution and Distance Analysis** (Clustered, random and regular spatial distribution, nearest neighbor analysis)	T12: **CGP Models II** (Calibrated journey-to-crime estimation, evaluating CGP models)
14:45-15:00	**BREAK**	**BREAK**
15:00-16:00	EXERCISE 1: **Spatial Descriptive Statistics**	EXERCISE 3: **Hot Spot Mapping**
16:00-17:00	EXERCISE 2: **Spatial Distribution and Distance Analysis**	EXERCISE 4: **Criminal Geographic Profiling**
17:00	**END DAY 1**	**END DAY 2**