Curriculum Plan

1. Course Name

Master of Studies in Applied Criminology and Police Management

2. Subject

Evidence-Based Policing

3. Target

The goal is that every participant who completes this course will have new knowledge, skills and capabilities for life-long learning and continuous quality improvement in the organizational performance of complex police agencies. Unlike the target of vocational training courses on one specific topic, the target of this post-graduate professional course is to broaden the vision and understanding of how police organizations and their leaders can adapt to a constantly changing world, creating capability to both lead and follow better the innovative police methods that will be required for success. Whether the specific problems are as enduring as domestic violence or as unprecedented as the massive increase in legal and illegal immigration to Europe, the course prepares participants to help solve them better by using more research and quantitative empirical evidence than police world-wide have ever used before in their history.

4. Knowledge

Each participant should gain a clear knowledge of the theories, methods, and published research content to date supporting the three major areas of police strategic and operational decision-making: 1) targeting police resources, 2) testing their use in specific programs, and 3) tracking the organizational delivery of tested strategies chosen by the agency to accomplish its objectives. In addition, they should know the 50 key concepts and 100 major milestones of evidence-based policing.

4.1. TARGETING

- **4.1.1. Power Few.** Understanding the application of Pareto curves to most patterns of behavior in crime and policing, in contrast to normal curve assumptions about the distributions of frequency and intensity of behavior. This includes such concepts as repeat offenders, hot spots of crime, and repeat victimization.
- **4.1.2. Prediction.** Understanding the use of retrospective analyses of patterns of behavior to make prospective resource allocations based on predictions of by whom, where, when and how various behaviors will be most likely to occur, assessing the statistical reliability of these predictions in terms of both false positives and false negatives; this includes the capacity to explain the differences between unconscious use of subjective and biased predictions with unknown error rates that can be
addressed by transparent use of objective and unbiased predictions with known error rates.

- **4.1.3. Triage.** Understanding what the late Apple Corp. CEO Steve Jobs described as “Deciding what not to do is as important as deciding what to do;” gaining operational understanding of the finite nature of resources and how best to compare alternative choices in how police agencies invest them by a common metric such as effect sizes expressed in terms of a Crime Harm Index (CHI) cutting across all types of crime prevention and detection practices.

### 4.2. TESTING

- **4.2.1. Sample.** Understanding that any useful test of police practices must be conducted on an unbiased sample of the general problem to be addressed, from which results are not only internally valid for estimating cause and effect, but externally valid for applying results to other people, places, situations and times.
- **4.2.2. Comparison.** Understanding that the effect size of any test is key to the cost-effectiveness of any police practice, and must be derived entirely from a comparison between a new practice and the standard or alternative practice used as a comparison; such comparisons must insure that the units tested must be made comparable between test groups, to the extent possible, by research designs and methods such as randomized allocation of different practices or prospectively matched samples.
- **4.2.3. Integrity.** Understanding that the internal validity of any test depends on the consistent application of the same police practice to all units within each group being compared, with few exceptions; inclusion of dropout cases and “analyze as you randomize” methods are essential features of balancing treatment integrity of a fair comparison with the causal impact of each treatment as delivered, even when (by mistake or non-compliance) it differs from that assigned.

### 4.3. TRACKING

- **4.3.1. Measuring.** Understanding that while “Not everything that counts can be counted, and not everything that can be counted counts,” as Albert Einstein said, it is essential for the most important police practices to be tracked by systematic counting of their use as required in the right places and times with the right people and situations; recognizing the revolutionary role of recent and future technologies such as mass public videography on I-phones of police encounters, police body-worn cameras, GPS tracking and new systems for measuring problem-oriented policing.
- **4.3.2. Feeding Back.** Understanding that measurement of police services delivery cannot improve police effectiveness if the measures taken are not fed back to the officers measured; appreciating the issues of procedural fairness and legitimacy within police agencies in how these data are presented to officers, alone and in groups; implementing systems for consistent and predictable methods of vetting the accuracy and implications of activity measurement before feeding back to officers measured.
- **4.3.3. Corrections.** Understanding the options and researchable questions about a theory and practice of leaders obtaining compliance with organizational policy by a “regulatory pyramid” of escalating sanctions, from “nudges” to dismissal, in order to insure that the public interest is served by the optimum delivery of the best selection and quantities of police practices identified by testing.
4.4. Key Concepts and Milestones

- 4.4.1. Understanding and recognizing the 50 key concepts of evidence-based policing (below).
- 4.4.2. Understanding and recalling the 100 major milestones in evidence-based policing, most of which consistent of research findings or methods.

5. Skills

- 5.1. Critical Assessment. Practised in reading and interpreting any research evidence on targeting, testing and tracking with a critical eye to the issues of research validity described in Section 4; knowing when not to accept a research conclusion or to act on it when the evidence does not support the conclusion.
- 5.2. Formulating Research Questions and Hypotheses. When a needed piece of knowledge or evidence is unavailable, students should be practiced in formulating the research question that must be answered for practical application to the police decisions to be made.
- 5.3. Applying Best Evidence to Decisions. Knowing where to look for evidence in both global research literature and agency information systems for making the kinds of predictions, tests and tracking of police performance that are needed to make better strategic and operational decisions.
- 5.4. Integrating all Three Ts. Rapidly making connections between the tracking of crime problems and their targeting; between the targeting of a community crime or harm problem and the tested or testable police methods for addressing it; between the results of testing and the ways in which the tested practices must be tracked to insure their delivery precisely as tested, as well as to further test the apparent best practice against a wide and diverse range of variants in the problems addressed with the results of tests in smaller samples of those problems.

6. Capabilities

The participants who complete this course will be able to make decisions, manage resources, and carry out operations to accomplish specific goals based upon:

- 6.1 comprehensive measures and ranking by units of all crime and related harm in any community, resulting in triage for the application of
- 6.2. the most effective police practices known from global and local research evidence for each specific pattern of crime or harm targeted, which they will then design systems for
- 6.3. tracking to insure that best-tested practices are deployed in ways that maintain the legitimacy of the police institution under a rule of law across a wide range of diverse races, religions, ethnicities, and other social forces dividing communities that police must manage impartially as they fulfill their mission.
- 6.4 Supporting the goals of the Society of Evidence-Based Policing (www.sebp.police.uk), as stated on its website:
Aim One: Increased use of best available research evidence to solve policing problems

We will:

- Raise awareness of the value of evidence-based practice.
- Provide access to research tools and guidance.
- Advocate evidence-based practice across all policing bodies.
- Provide a forum for police professional researchers.

Aim Two: The production of new research evidence by police practitioners and researchers

We will:

- Support police practitioners to undertake research projects.
- Support police practitioners to access research expertise.
- Support researchers to access police data.
- Facilitate awareness of ongoing police research projects.

Aim Three: Communication of research evidence to police practitioners and the public

We will:

- Disseminate police-based research to different audiences.
- Present the implication of research findings for policing practice.
- 6.5. Design and lead research projects in policing.
- 6.6. Explain and teach evidence-based policing to other police professionals.

7. Contents

Theories of predictions, and of cause and effect. Quantitative and qualitative research methods on police practices. Decision protocols for targeting, testing and tracking. Implementation of new and ongoing policies and practices by anticipating obstacles and planning for how to avoid or overcome the obstacles. Public communication and dialogue about decisions based on research evidence. Integration and application of research to practice in policing at all levels.

8. Comments

- The course is taught in seminars, lectures, group project presentations, workshops and a debate.
- All students reside in Cambridge colleges with other students in the course.
UK and international police leaders from the US, Australia and elsewhere provide guest lectures

- Over 85% of students are police leaders; 99% are police employees.
- An international student body provides rich comparative discussions.