CRIMINOLOGY (CRIM)

CRIM 1000 Criminology
This introductory course examines the multi-disciplinary science of law-making, law-breaking, and law-enforcing. It reviews theories and data predicting where, when, by whom and against whom crimes happen. It also addresses the prevention of different offense types by different kinds of offenders against different kinds of people. Police, courts, prisons, and other institutions are critically examined as both preventing and causing crime. This course meets the general distribution requirement.
Fall
Also Offered As: SOCI 2920
1 Course Unit

CRIM 1100 Criminal Justice
This course examines how the criminal justice system responds to crime in society. The course reviews the historical development of criminal justice agencies in the United States and Europe and the available scientific evidence on the effect these agencies have on controlling crime. The course places an emphasis on the functional creation of criminal justice agencies and the discretionary role decision makers in these agencies have in deciding how to enforce criminal laws and whom to punish. Evidence on how society measures crime and the role that each major criminal justice agency plays in controlling crime is examined from the perspective of crime victims, police, prosecutors, jurors, judges, prison officials, probation officers and parole board members. Using the model of social policy evaluation, the course asks students to consider how the results of criminal justice could be more effectively delivered to reduce the social and economic costs of crime.
Spring
Also Offered As: SOCI 2921
1 Course Unit

CRIM 1200 Statistics for the Social Sciences I
Statistical techniques and quantitative reasoning are essential tools for properly examining questions in the social sciences. This course introduces students to the concepts of probability, estimation, confidence intervals, and how to use the statistical concepts and methods to answer social science questions. The course will require the use of R, a free, open source statistical analysis program. This course has been approved for the quantitative data analysis requirement (QDA).
Fall
1 Course Unit

CRIM 1201 Statistics for the Social Sciences II
In this course, students learn to conduct quantitative data analyses for social sciences, with an emphasis on identifying causal relationships in data. Many social science analyses aim to answer causal questions: Do longer prison sentences reduce crime? Do tougher gun laws reduce homicides and suicides? Can summer jobs help keep youth safe? Students will learn about research designs and data analysis methods to answer these kinds of questions, and especially to learn to implement them in practice. The goal of this class is to help students conduct their own analyses, and to become critical readers of statistical analyses, both in social science publications and in public discourse. The focus will be on what to compute and how to interpret the results. The emphasis is on the intelligent use of statistics. We will be using R, an open-source programming language.
Spring
Prerequisite: CRIM 1200
1 Course Unit

CRIM 2005 Violent Crime
This course examines the definitions, patterns, and impacts of violent crime and the attendant causes and policy responses. Students will critically assess a range of theories that explore the sociological, psychological, and developmental precursors to violent offending. The topics covered in this course include generality and specificity in offending, homicide, gun violence, group violence, and intimate partner violence. Understanding the historic and contemporary research on violence is a central component of this course and this research is used to guide discussion and assessment of societal responses to violent crime policy. This course is intended to foster a nuanced understanding of violent crime and complexities of its policy implications.
Not Offered Every Year
1 Course Unit

CRIM 2010 American Death Penalty in Theory and Practice
Over the past forty years, in response to controversy over the American death penalty, the Supreme Court has created a framework of rules designed to make the death penalty conform to current societal standards. In this course, we will identify the critical issues identified by the courts (and the critics) in light of the practical realities of capital litigation, and we will ask whether the efforts to address these issues have been successful. The class will use specific case examples to identify the critical points in a death penalty case- for example, the decision to designate a prosecution as "capital", the performance of defense counsel, the penalty decision, and the method of execution. These critical stages will provide a platform for discussing critical issues like the proper limits of discretion; bias; cruelty; and the decision to disqualify certain groups of people from capital punishment (the mentally disabled, minors). Students will be assigned readings from different kinds of sources. Cases from the Supreme Court will identify key issues and the efforts to address them under the law. More general death penalty history will provide some context. We will also read pieces by advocates (pro and con). Finally, we will focus on a few specific prosecutions and discuss how abstract theories work in a particular case.
Fall
1 Course Unit
**CRIM 2015 Crime and Media**
This course explores the intricate relationship between media and crime through a multidisciplinary lens. It delves into the foundational principles of journalism and news reporting, examining how news values shape public perceptions of crime. Students will analyze various theoretical frameworks and apply them to understand moral panics, media portrayals of different demographic groups, and the depiction of law enforcement in both fictional and non-fictional contexts. Key topics include the influence of media on public fear and perception of crime, the portrayal of children, women, police, and minority groups, and the comparative analysis of crime news across different countries. The course also investigates the role of media in political discourse and its impact on voter beliefs, as well as media coverage of white-collar crime and anti-corruption efforts. Through critical examination of police, courts, and prisons as depicted in the media, students will gain insights into how these institutions are both represented and scrutinized in public discourse. This course provides a comprehensive understanding of the symbiotic relationship between crime and media, emphasizing critical thinking and analytical skills. By the end of the unit students should be able to 1) Assess the role of news sources and news values in producing crime news, 2) Evaluate crime news in historical context and as a sociocultural product, 3) Analyze and theorize the representation of offenders, victims, and criminal justice agencies in the mass media, 4) Engage with a range of theoretical and conceptual explanations for media renderings of crime and criminal justice, and 5) Evaluate fictional representations of crime and criminal justice by locating them historically, culturally, and socially.

Not Offered Every Year
1 Course Unit

**CRIM 2020 Criminal Justice Reform: A Systems Approach (SNF Paideia Program Course)**
America's criminal justice system, which affects every community in the United States, is often criticized for being biased, overly punitive, ineffective at reducing crime, and resistant to change. This course will review the various components of the criminal justice system, identify the structural challenges to the widespread implementation of reforms or improvements to the system, and provide students with a conceptual framework for dialogue and structural/cultural change that can improve the legitimacy and effectiveness of our criminal justice agencies and enhance the delivery of justice for all.

Not Offered Every Year
1 Course Unit

**CRIM 2030 Law and Criminal Justice**
This course explores constitutional criminal procedure or the law of the Fourth, Fifth, and Sixth Amendments to the United States Constitution. Topics included the laws and rules associated with search and seizure, arrest, interrogation, the exclusionary rule, and deprivation of counsel. Social science evidence that supports or raises questions about legal doctrine will be examined. No prerequisites are required.

Fall or Spring
1 Course Unit

**CRIM 2040 Forensic Analysis**
This course discusses the need for stronger scientific foundations in the analysis of forensic evidence from a scientific and a policy perspective. Forensic evidence, such as fingerprints, firearms, and hair, has been analyzed for hundreds of years to inform crime investigations and prosecutions. However, recent advances, especially the use of DNA technology, have revealed that a faulty forensic analyses may have contributed to wrongful convictions. These advances have demonstrated the potential danger of information and testimony derived from imperfect analysis, which can result not just in wrongful convictions but also in errors of impunity. In this course, students learn about the history of forensics, as well as about the recent advances that aim to improve current practices. It is an interdisciplinary course, but it focuses mostly on the statistical and scientific aspects of testing in forensics. Students discuss recent solutions that quantify the uncertainty, limitations, and errors associated with human factors, pattern evidence, and digital evidence. No prior statistical or forensic knowledge is expected. The course will be useful for students who wish to become forensic practitioners, law enforcement officers, lawyers, judges, researchers, or simply informed citizens.

Fall
1 Course Unit

**CRIM 2060 Crime and Human Development**
One of the central research problems in criminology is the relationship between human development and the likelihood of committing crime. This course will examine the tools for measuring the onset of crime, its persistence, intermittency, and desistence. These tools include the study of birth cohorts of everyone born in a certain time and place, life course studies of juvenile delinquents and non-delinquents, trajectory analysis of people studied from pre-school through middle age, and interviews with 70 year old former delinquents who reflect on how their life-course affected the crimes they committed. This course will also examine the research findings that have been produced using these tools. Students will be asked to consider what these findings imply for major theories of crime causation as well as policies for crime prevention.

Spring
1 Course Unit

**CRIM 2080 Neighborhood Dynamics of Crime**
Crime varies in time, space and populations as it reflects ecological structures and the routine social interactions that occur in daily life. Concentrations of crime can be found among locations, with antisocial activities like assaults and theft occurring at higher rates because of the demographic make-up of people (e.g. adolescents) or conflicts (e.g. competing gangs), for reasons examined by ecological criminology. Variation in socio-demographic structures (age, education ratios, and the concentration of poverty) and the physical environment (housing segregation, density of bars, street lighting) predicts variations between neighborhoods in the level of crime and disorder. Both ethnographic and quantitative research methods are used to explore the connections between the social and physical environment of areas and antisocial behavior.

Spring
Also Offered As: URBS 2090
1 Course Unit
CRIM 2090 Wrongful Convictions
This course explores wrongful convictions from an interdisciplinary perspective. Using research from the disciplines of law, criminology, psychology and sociology, this course explores how legal errors occur and how they might be prevented in the future. Connections to quality control research and practice in other industries will also be examined. No prerequisites are required.
1 Course Unit

CRIM 2230 Forensic Anthropology
This course will investigate and discuss the various techniques of analysis that biological anthropologists can apply to forensic cases. Topics include human osteology, the recovery of bodies, the analysis of life history, the reconstruction of causes of death, and various case studies where anthropologists have contributed significantly to solving forensic cases. Discussions will include the limitations of forensic anthropology and the application of DNA recovery to skeletal/mummified materials.
Not Offered Every Year
Also Offered As: ANTH 3230
1 Course Unit

CRIM 3250 Methods of Investigation: Global Quantitative Data
In a time of abundant fake news and mis-information, it becomes ever important for students (for all, really!) to learn how to critically assess (and produce) robust empirical evidence to uncover patterns and trends about social life. The goal of this course is to do just that through the use of census microdata, video and photographs, with a focus on social inequality! Or, in other words...a first goal of this course is to introduce students to empirical work that will let them identify robust evidence on social inequality across a diverse set of topics and countries. A second goal of the course is to provide students with key analytical skills through working with microdata to uncover social inequality globally. Having exposure and hands-on experience with the correct tools to read (and produce) evidence on patterns and trends on social research is an important skill for students in any major. We will use publicly available census microdata on more than 100 countries from IPUMS and photographs from the Dollar Street Project. Students will work with a country, produce their own analysis and combine it with photographs and videos. As a Signature Course, a third key goal of the course is to teach students skills that will enable them to more easily read empirical work and write results more clearly and concisely. Students will practice reading academic research, do class exercises, write case studies, and complete a research paper/video/photo essay that will aid them in these goals.
Spring
1 Course Unit

CRIM 4000 Research Seminar in Experiments in Crime and Justice
This course focuses on examining data from experiments in criminology including: randomized controlled trials of criminal justice policies, "natural" experiments in crime, and other quasi-experimental studies. A series of experiments conducted by Penn scholars and elsewhere will be examined. This seminar also guides criminology majors in writing a research proposal for their thesis. Students will learn about how to formulate a research question, develop a review of the literature, and how to apply necessary empirical methods. The final paper for this course will be a research proposal that can serve as the basis for the student's senior thesis and to satisfy the senior capstone requirement. Readings will come from the disciplines of criminology, sociology, psychology, economics, and urban planning.
Fall
1 Course Unit

CRIM 4001 Senior Research Thesis
Senior Research Thesis is for senior Criminology majors only. Students are assigned advisors with assistance from the Undergraduate Chair.
Prerequisite: CRIM 4000
Spring
1 Course Unit

CRIM 4002 Criminal Justice Data Analytics
This course covers the tools and techniques to acquire, organize, link and visualize complex data in order to answer questions about crime and the criminal justice system. The course is organized around key questions about police shootings, victimization rates, identifying crime hotspots, calculating the cost of crime, and finding out what happens to crime when it rains. On the way to answer these questions, the course will cover topics including data sources, basic programming techniques, SQL, regular expressions, web scraping, and working with geographic data. The course will use R, an open-source, object oriented scripting language with a large set of available add-on packages.
Fall
Also Offered As: SOCI 4002
Mutually Exclusive: CRIM 6002
1 Course Unit

CRIM 4012 Machine Learning for Social Science
This course provides an introduction to machine learning techniques for social science researchers. The course will cover a range of techniques including supervised and unsupervised learning, as well as more specialized methods such as deep learning and natural language processing. The course will also discuss ethical and privacy considerations in the use of machine learning, as well as the role of machine learning in policy and decision-making. The aim of the course is to be focused on applications. While the class will present the formal background on the development of the machine learning methods, the class will focus on putting the tools into practice. We will use data on a variety of topics including criminal justice data (recidivism prediction) as well as other social science disciplines. Students completing the course will know how to apply several of the most common machine learning tools to a variety of social science problems including prediction and clustering. The course will also discuss the role of machine learning in causal inference.
Spring
Also Offered As: SOCI 3501
Mutually Exclusive: CRIM 6012
1 Course Unit

CRIM 4740 Modern Regression for the Social, Behavioral and Biological Sciences
Function estimation and data exploration using extensions of regression analysis: smoothers, semiparametric and nonparametric regression, and supervised machine learning. Conceptual foundations are addressed as well as hands-on use for data analysis. This course may be taken concurrently with the prerequisite with instructor permission.
Spring
Also Offered As: STAT 4740
Prerequisite: STAT 1020 OR STAT 1120
1 Course Unit
CRIM 5350 Quantitative Methods for Public Policy
This course provides an introduction to applied statistical techniques in the social sciences and is tailored, in particular, to students pursuing the master of science degree in the Department of Criminology. It is taught as a basic course in statistics and presumes minimal mathematical or statistical background. We’ll begin with a brief introduction to the research process. We’ll then cover the computation, interpretation and understanding of basic descriptive statistics, distributions, hypothesis testing, measures of association and finally regression analysis. Depending on how much time we have, I will cover several more advanced topics in regression analysis at the end of the semester.
Fall
1 Course Unit

CRIM 6000 Pro-Seminar in Criminology
This course provides an overview of the leading criminological theories of crime. The central focus is on the major theories of crime developed over the past century from the disciplines of economics, psychology, and sociology. The course will focus on the application of social science research as a way to evaluate theories of crime. Special attention is devoted to the issues of measurement of crime and what is known from the available empirical data. In addition, the course will focus on how these theoretical perspectives relate to public policy responses to crime.
Fall
1 Course Unit

CRIM 6001 Pro-Seminar in Criminal Justice
This course provides an overview of what we know about the criminal justice system in the United States and other developed nations. The central purpose of the course is to increase your knowledge about how the U.S. criminal justice system works but we will also spend a great deal of time thinking about the quality of the available evidence and how we know what we know. Topics covered will vary from year to year; recent topics have included police use of force, capital punishment, pre-trial detention, the use of predictive algorithms in the criminal justice system and the relationship between immigration and crime in the United States.
Spring
Prerequisite: CRIM 6000
1 Course Unit

CRIM 6002 Criminal Justice Data Analytics
This course covers the tools and techniques to acquire, organize, link and visualize complex data in order to answer questions about crime and the criminal justice system. The course is organized around key questions about police shootings, victimization rates, identifying crime hotspots, calculating the cost of crime, and finding out what happens to crime when it rains. On the way to answer these questions, the course will cover topics including data sources, basic programming techniques, SQL, regular expressions, web scraping, and working with geographic data. The course will use R, an open-source, object oriented scripting language with a large set of available add-on packages.
Fall
Also Offered As: SOCI 6002
Mutually Exclusive: CRIM 4002
1 Course Unit

CRIM 6003 Research Methods/Crime Analysis
This course provides an overview of the application of social science research methods and data analysis to criminology. Students will learn research design principles and statistical techniques for the analysis of social science data, including how to interpret results as part of the rigorous practice of evidence-based criminology. M.S. students will conduct a semester-long, data-intensive crime analysis project using quantitative methods to address a specific research question. Student projects culminate with a poster presentation, an oral defense, and the submission of a written research paper.
Spring
1 Course Unit

CRIM 6004A Criminology in Practice
In this capstone course, students will meet weekly with guests who work on or close to the front line of the criminal justice system. Past guests have included police chiefs, forensic scientists, lobbyists for gun rights and lobbyist for gun control, formerly incarcerated individuals, crime analysts, directors of sentencing commissions, prosecutors and defenders, politicians, and researchers at research organizations working closely with criminal justice agencies. Students share their career paths, the roles of their organizations in the justice system, and key justice system challenges. Students interact with all guest speakers.
Fall
0.5 Course Units

CRIM 6004B Criminology in Practice
In this capstone course, students will meet weekly with guests who work on or close to the front line of the criminal justice system. Past guests have included police chiefs, forensic scientists, lobbyists for gun rights and lobbyist for gun control, formerly incarcerated individuals, crime analysts, directors of sentencing commissions, prosecutors and defenders, politicians, and researchers at research organizations working closely with criminal justice agencies. Students share their career paths, the roles of their organizations in the justice system, and key justice system challenges. Students interact with all guest speakers.
Spring
0.5 Course Units

CRIM 6005 Evidence-Based Crime Prevention
This course considers the use of evidence to identify effective crime prevention policies. The course will teach students to think critically about what constitutes convincing evidence, use benefit-cost analysis in comparing policy alternatives, and write effective policy memos that can translate research into practice. We will develop these skills by studying the effects of different policy approaches to crime prevention including incarceration, policing, gun control, drug regulation, and place-based interventions, as well as education, social programs, and labor market policies. Emphasis will be on the methodological challenges to identifying "what works" and the empirical methods to overcome those challenges.
Fall
1 Course Unit

CRIM 6010 Causal Inference in the Social Sciences I
This is the first course in a two half-credit course sequence. The course is intended for graduate students who are interested in learning how to do applied social science research which seeks to address causal questions. The course is highly applied and focuses on training students to understand how to use the most common econometric methods that are used to analyze observational data.
Fall
0.5 Course Units
CRIM 6011 Causal Inference in the Social Sciences II
This is the second course in a two half-credit course sequence. The course is intended for graduate students who are interested in learning how to do applied social science research which seeks to address causal questions. The course is highly applied and focuses on training students to understand how to use the most common econometric methods that are used to analyze observational data.
Prerequisite: CRIM 6010
0.5 Course Units

CRIM 6012 Machine Learning for Social Science
This course provides an introduction to machine learning techniques for social science researchers. The course will cover a range of techniques including supervised and unsupervised learning, as well as more specialized methods such as deep learning and natural language processing. The course will also discuss ethical and privacy considerations in the use of machine learning, as well as the role of machine learning in policy and decision-making. The aim of the course is to be focused on applications. While the class will present the formal background on the development of the machine learning methods, the class will focus on putting the tools into practice. We will use data on a variety of topics including criminal justice data (recidivism prediction) as well as other social science disciplines. Students completing the course will know how to apply several of the most common machine learning tools to a variety of social science problems including prediction and clustering. The course will also discuss the role of machine learning in causal inference.
Spring
Also Offered As: SOCI 6012
Mutually Exclusive: CRIM 4012
1 Course Unit

CRIM 6710 Violence: A Clinical Neuroscience Approach
Developed for both Psychology and Criminology graduates in particular, this interdisciplinary course outlines a clinical neuroscience approach to understanding violence in which the tools of neuroscience- neuroanatomy, neurophysiology, neurocognition, neuroendocrinology, neuropharmacology, molecular and behavioral genetics- are used to help inform the etiology and treatment of violence. Clinical components include psychopathy, proactive and reactive aggression, homicide, domestic violence, conduct disorder, oppositional defiant disorder, antisocial personality disorder, crime, and delinquency as well as their comorbid conditions (schizophrenia, drug abuse, hyperactivity). The interaction between social, psychological, and neurobiological processes in predisposing to violence will be highlighted, together with neurodevelopmental perspectives on violence focusing on prospective longitudinal and brain imaging research. Key implications for the criminal justice system, neuroethics, forensics psychology, and intervention will also be outlined.
Fall
1 Course Unit

CRIM 7000 Advanced Pro-Seminar in Criminology
This second year doctoral course is a weekly discussion group designed to help students integrate their coursework from different disciplines around the unifying perspectives of criminology. It focuses on preparation for the doctoral comprehensive examination, detailed critiques of published research reports, and colloquia by leading guest lecturers presenting new research results. Students preparing for dissertation research on the causes and prevention of crime will report on their developing research ideas.
Fall
1 Course Unit

CRIM 7100 Advanced Pro-Seminar in Criminal Justice
This second year doctoral course is a weekly discussion group designed to help students integrate their coursework from different disciplines around the behavior and operation of criminal law systems. It focuses on preparation for the doctoral comprehensive examination, detailed critiques of published and unpublished research reports, and colloquia by leading guest lecturers presenting new research results. Students preparing for dissertation research on the behavior of criminal law will report on their developing research ideas.
Spring
1 Course Unit

CRIM 9999 Independent Study and Research
Primarily for graduate students who work with individual faculty upon permission. Intended to go beyond existing graduate courses in the study of specific problems or theories or to provide work opportunities in areas not covered by existing courses.
Fall or Spring
1-2 Course Units