PA 501  
**Essentials for Public Management in a Complex Society: Processes, Structures, and Values**  
This course provides an understanding of the fundamental theories, key practices, and underlying issues that provide the framework for contemporary American public administration. It will discuss the political and administrative values affecting the theory and practice of public administration in the United States; review the historical development of American public administrative systems and processes; examine key issues facing public administrators in the light of both traditional and contemporary values and views; critically evaluate administrative approaches to public service delivery; and explore contemporary strategies to address critical problems in a rapidly changing world, such as new public management, public private partnerships, and strategic competitiveness.  
*Lecture: 3 Lab: 0 Credits: 3*

PA 502  
**Leading and Managing Knowledge-Intensive Organizations**  
PA 502 builds awareness and understanding of the behavior of individuals and groups in organizations, preparing managers to be more effective within their organizational contexts. Topics include individual differences in motivation, perception, culture and learning style, group and organizational dynamics, and the impact of organizational structure and culture on behavior. Leadership techniques for influencing other organizational members, creative problem-solving and decision-making, ethics and values-based managing are covered. This course helps students relate basic theories, concepts, and techniques to real-world situations through the extensive use of case studies.  
*Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.  
*Lecture: 3 Lab: 0 Credits: 3*

PA 503  
**Administration Law**  
This course considers the role of statutes, case law, and administrative law in the establishment, operation, and control of public agencies. It also examines how legislation and administrative procedures direct and constrain the exercise of discretion by public managers and how they ensure accountability and the fair treatment of the public.  
*Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.  
*Lecture: 3 Lab: 0 Credits: 3*

PA 505  
**The Law and the Nonprofit Sector**  
This course is an examination of local, state, and federal law as it pertains to the nonprofit sector. This includes such things as the IRS, lobbying, human resources, property, and contracts.  
*Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.  
*Lecture: 3 Lab: 0 Credits: 3*

PA 506  
**Managerial Economics**  
This course examines the behavior of firms and households and the determination of prices and resource allocation in market economy. Topics include empirical demand, production and cost functions, monopoly, oligopoly, and pricing practices.  
*Lecture: 3 Lab: 0 Credits: 3*

PA 510  
**Managerial Communications**  
This course provides hands-on training and practice in the styles of writing and related communications skills needed by all public managers, including memoranda, letters, and formal reports. Emphasis is placed on learning and practicing effective writing and communication related to real-world administrative and managerial situations relevant to the student's particular current or chosen professional position.  
*Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.  
*Lecture: 3 Lab: 0 Credits: 3*

PA 511  
**Comparative Public Administration**  
This course provides an introduction to comparative analysis of systems of public administration in selected nations, including Great Britain, Japan, China, and major non-governmental organizations such as the European Union and the United Nations. The nations and organizations discussed will be compared to each other and to the United States. Areas explored will include: the historical antecedents of current national administrative systems (including the development of the nation-state), public administration models and structure in both developed and developing nations, the relationship between bureaucracies and political systems, the rise of the international nongovernmental organization, and the impact of corruption on public administration. (3-0-3)  
*Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.  
*Lecture: 3 Lab: 0 Credits: 3*

PA 512  
**Public Advocacy**  
The goal of this course is to assist students functioning as strong advocates in their future careers and to help them prepare for their thesis or final project presentation. This is an advanced research and writing course. Public Advocacy is the study of effective argument. The course is designed to allow students to focus their prior learning experiences through problem analysis and advocacy. Using individual topics, students will address the problems of advocacy including different types of advocacy situations requiring different information, analyses, and presentations. Substantive topics of current interest and controversy will be discussed in the context of developing and advocating a particular position.  
*Lecture: 3 Lab: 0 Credits: 3*
PA 514
Government Management and Information Systems
A practical introduction to database management programs. Demonstrates the use of a variety of other office automation software tools (including graphics, desktop publishing, telecommunications/file transfer, bibliographic text retrieval, computer-aided instruction, and expert systems). Considers issues relating to effective computer management, including computer ethics, security, needs assessment and training. Prior working knowledge of personal computer operating systems, word processing, and spreadsheet programs is needed.
Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 Lab: 0 Credits: 3

PA 516
Information Technology in Public Administration
The course has the learning objective of becoming aware of the general management challenges that the use of information technology presents for governments and to be able to develop appropriate policies that address these challenges. Upon completion, students should be able to apply best practices to the management of computer hardware, software, networking, and other technologies in government and appreciate how the use of electronic government technology can transform government and be able to help governments develop and manage effective programs of e-government use.
Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 Lab: 0 Credits: 3

PA 522
Effective Management of Human Resources in Environments of Scarce Resources
This course focuses on human resource planning, recruitment, examination, and promotion of procedure. It familiarizes students with the key human resources management factors involved in supervising employees as well as collective bargaining, affirmative action, and employee productivity and performance evaluation. It is directed towards practical applications in dealing with these topics as managers and employees working in their teams or individually and covers employee professional responsibility and behavior. Students in this class will learn to utilize human resource planning, recruiting, interviewing and selection processes to improve organizational outcomes; analyze the legal/cultural aspects of personnel when making organizational decisions; identify the key components of performance management to improve themselves and their direct reports; develop specific solutions to solve critical workplace personnel issues; and apply a variety of motivation and team performance techniques in current and future organizational settings.
Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 Lab: 0 Credits: 3

PA 532
Managing Public Financial Resources in a Changing World
Managing Public Financial Resources in a Changing World exposes students to fundamental concepts and strategies of public financial resource management in a rapidly changing fiscal environment. It provides students with the concepts and skills needed to evaluate budget processes and documents, understand the role of politics and planning in financial management, and to evaluate the financial condition of governments. Emphasizing best practice models and case studies, the course will focus primarily on local government finance with some reference to state government policies and practices. Some references also will be made to nonprofit budgeting accounting practices.
Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 Lab: 0 Credits: 3

PA 533
Advanced Financial Management for Public and Nonprofit Sectors
An advanced course focusing on the application of techniques used by financial managers to evaluate government financial condition and performance. Students will conduct case studies in which they apply tools such as performance measurement, budget analysis, priority setting, and financial indicator analysis to evaluate core public financial documents including budgets, capital improvement plans, and audited financial statements.
Prerequisite(s): PA 532*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 Lab: 0 Credits: 3

PA 534
Financial Management in the Nonprofit Sector
Nonprofits are business organized on many of the same principle as for-profits, but there are differences including financial reporting to boards of directors, donation accounting, reporting to government funding sources, tax reporting, and even investment strategies (for example program related investing). This course will equip a nonprofit manager to responsibly guide the complex financial life of a modern nonprofit.
Prerequisite(s): PA 532
Lecture: 3 Lab: 0 Credits: 3

PA 535
Resource Development in the Nonprofit Sector
Resource Development in the Nonprofit Sector provides insight and learning into fundraising, marketing, and strategic planning in the nonprofit sector. This course offers an in-depth look into finding and securing the resources necessary to the success of nonprofit organizations.
Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 Lab: 0 Credits: 3
PA 536  
**Strategy and Structure: Homeland Security**  
This course introduces the student to the National Strategy for Homeland Security and describes the structure under which it was originally designed, the events that have affected the original concept and the various changes that is has undergone since the events of 09/11/2001. The student will become intimately acquainted with the key legal parameters affecting HS and the government components involved in HS operations, enforcement and intelligence. An emphasis on the overall integration of state, local, tribal, and private sectors will enable the student to apply the tenets of HS to their own individual situations. Other topics will include an understanding of how to conduct Threat Assessments as well as a cursory understanding of the Intelligence Cycle.  
**Prerequisite(s):** PA 501*, An asterisk (*) designates a course which may be taken concurrently.  
**Lecture:** 3  **Lab:** 0  **Credits:** 3

PA 537  
**Crisis Management and Homeland Security**  
This course is taught by experts from various disciplines and provides a basic overview of homeland security including a brief history of terrorism. Specifically, the course is intended to provide the issues related to homeland security, awareness on the types of threats (damage to building processing plants, public facilities, etc.), and the type of risks involved. Other relevant aspects include types of weapons used by modern terrorists; how one goes about estimating risk and threat to a facility; how buildings and people respond when subjected to blast and fires; the role of search and rescue operation; weapon effect; building security; facility analysis to identify vulnerable areas given a threat; procedures for minimizing vulnerability; effective fire safety; contingency plans, etc. At the conclusion of this course the student will know how to estimate the risk and threat to a given facility, prepare a basic security audit; develop a basic contingency plan, develop passive/active security system for a given facility and develop post event search and rescue operations.  
**Prerequisite(s):** PA 501*, An asterisk (*) designates a course which may be taken concurrently.  
**Lecture:** 3  **Lab:** 0  **Credits:** 3

PA 538  
**Information Systems Security and Cyber Crime**  
Provides an introduction to information systems security, an in-depth review of topics in cyber-crime issues in the public safety field and identifies methods of preventing cyber-crime in organizations. It includes issues involved with policy and legal issues of enforcement of cyber-crime laws, as well as tools used for network security.  
**Prerequisite(s):** PA 501*, An asterisk (*) designates a course which may be taken concurrently.  
**Lecture:** 3  **Lab:** 0  **Credits:** 3

PA 539  
**Local Government Management**  
This course examines the governmental structure in which public safety administrators work and studies the interrelationship of public safety administrators with the rest of the organization. The leadership and management roles of public safety officials, finances & budgeting in local government, and ethics in the profession will be examined.  
**Prerequisite(s):** PA 501*, An asterisk (*) designates a course which may be taken concurrently.  
**Lecture:** 3  **Lab:** 0  **Credits:** 3

PA 540  
**Alternative Dispute Resolution**  
This course will introduce you to the formally accepted varieties of resolving disputes without going to court: negotiation, mediation, fact-finding, mini-trials, court sponsored settlement procedures, and arbitration. We will focus on process: what each term means; how the different processes work and compare with one another; when they can and cannot be used more effectively and how; and what considerations, techniques and/or factors make each kind of process work best. This is a survey course to give a general idea of the different kinds of alternative dispute resolution methods. Although simulations are used it is not equivalent to a full skills training program. Note: This course is also applicable to the nonprofit sector.  
**Lecture:** 3  **Lab:** 0  **Credits:** 3

PA 541  
**Performance Measurement in Nonprofit and Public Management**  
Performance management is a process of measuring progress toward specific organizational goals and objectives through the use of quantitative indicators of efficiency, effectiveness and quality. It is an essential tool that can help nonprofit and government leaders and staff plan and manage the programs and services they offer to customers, clients, and the public. This is an applied course which will help students understand performance management concepts, develop specific performance measures, and apply performance management techniques to solve real world problems in both the nonprofit and public sectors.  
**Prerequisite(s):** PA 501*, An asterisk (*) designates a course which may be taken concurrently.  
**Lecture:** 3  **Lab:** 0  **Credits:** 3

PA 543  
**Public Policy, Nonprofits, and Philanthropy**  
This course examines the long history of charitable giving across the globe with special emphasis on the United States. In particular this course will focus on the philosophical roots of philanthropy, organized giving, and the role philanthropy has played in the development of modern public policy as it pertains to health and human services.  
**Prerequisite(s):** PA 501*, An asterisk (*) designates a course which may be taken concurrently.  
**Lecture:** 3  **Lab:** 0  **Credits:** 3
PA 550  
**Social Entrepreneurship**  
This course gives students a practical introduction to the exciting and rapidly growing field of social entrepreneurship. The course will begin by introducing students to contemporary understandings of poverty, its causes, and traditional poverty alleviation strategies. It will then turn to key concepts regarding social ventures including entrepreneurship, organizational structures (for profit, nonprofit, and hybrid), financing, marketing, and performance assessment (social and environmental impact). We will also examine the challenges that are faced in creating and operating social enterprises in different parts of the world. The course includes guest lectures by the Stuart School of Business faculty and social entrepreneurs working in different areas (such as health, education, and environment). Students will gain hands-on experience by either developing a business plan for a social enterprise to address a specific real world problem or assisting an existing social venture in developing a business plan geared towards an expansion of its services. It is expected that the plans can be entered into a variety of social venture competitions.  
**Lecture:** 3  
**Lab:** 0  
**Credits:** 3

PA 551  
**Public Infrastructure Management**  
This course considers the status and operation of public infrastructure facilities in the United States generally and in the Chicago metropolitan area, with particular attention to the responsibilities and roles of the public works manager. Explores the relationship between the engineering, administrative, and political aspects of public works management. Focuses on critical infrastructure issues through case studies.  
**Prerequisite(s):** PA 501*, An asterisk (*) designates a course which may be taken concurrently.  
**Lecture:** 3  
**Lab:** 0  
**Credits:** 3

PA 552  
**Human Services Policy and Administration**  
This course examines the major issues associated with the administration and operation of social welfare and health services in the United States by governments and nonprofit organizations. It is designed for students who work in such agencies and for those who have regular contact with them or their clientele. Structure, funding, staffing and other operating characteristics are examined.  
**Prerequisite(s):** PA 501*, An asterisk (*) designates a course which may be taken concurrently.  
**Lecture:** 3  
**Lab:** 0  
**Credits:** 3

PA 553  
**Public Safety Administration**  
This course deals with contemporary public safety and security management in communities for public safety professionals, public administrators, and law enforcement officials who deal with public safety issues existing in post-9/11 American society. Examines the relationship between police/public safety policy, operations, and administration. Addresses various current problems and issues through case studies. Focuses mainly on the City of Chicago and surrounding metropolitan area.  
**Prerequisite(s):** PA 501*, An asterisk (*) designates a course which may be taken concurrently.  
**Lecture:** 3  
**Lab:** 0  
**Credits:** 3

PA 555  
**Introduction to Urban and Regional Planning**  
The subject of this course is governmental and private sector activities that influence the maintenance and development of the built environment. Students learn both quantitative and qualitative analysis and are introduced to planning systems incorporating fiscal analysis, social analysis, transportation analysis, and demographic and economic analysis. They will also learn about various processes providing participation and citizen input to the development of plans for the built environment. Regulatory tools covered include zoning, comprehensive plans, neighborhood planning, and subdivision regulation.  
**Prerequisite(s):** PA 501*, An asterisk (*) designates a course which may be taken concurrently.  
**Lecture:** 3  
**Lab:** 0  
**Credits:** 3

PA 556  
**Public Management Strategies for the 21st Century**  
In the United States, an increasing proportion of the goods and services traditionally provided by governmental employees in the context of a governmental bureaucracy are now provided by outside contractors, or through indirect means such as social, economic regulation, tax policy, loan guarantees, vouchers, and manipulation of incentives for the private sector. This course is intended to provide students with an understanding of various tools used by governments throughout the West as the traditional rule-based bureaucracy is replaced by other types of institutions and other means to provide goods and services traditionally provided by government.  
**Prerequisite(s):** PA 501*, An asterisk (*) designates a course which may be taken concurrently.  
**Lecture:** 3  
**Lab:** 0  
**Credits:** 3

PA 557  
**Urban and Regional Development**  
This course covers materials on infrastructure management and the interrelationship of infrastructure management to urban and regional development. The course acquaints students with the increasing role of the private sector in infrastructure maintenance, development, and management. Students learn various analytic techniques useful for officials responsible for urban and regional development (including development of new infrastructure) and for the continuing maintenance and management of existing infrastructure. Students learn analytic techniques relating to management and planning.  
**Prerequisite(s):** PA 501*, An asterisk (*) designates a course which may be taken concurrently.  
**Lecture:** 3  
**Lab:** 0  
**Credits:** 3
PA 558
Energy and Environmental Policy
This course requires successful completion of at least one other course marked with a satisfaction of IIT's Basic Writing Proficiency Requirement. This course places energy and environmental policy in domestic and global contexts. It also traces the economic and political implications of dependence on fossil fuels and the attempt to develop alternate energy sources and promote conservation. It assesses the environmental effects of resource consumption and the effort to control these effects by increased efficiency and regulation of pollution, and explores such problems such as nuclear waste, acid rain, global warming, and deforestation. Finally, it examines national and international attempts at economic, political, and technological solutions.
Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 Lab: 0 Credits: 3

PA 559
Issues in Globalization
Globalization has become a powerful buzzword in social science and in popular discourse. This course utilizes a sociological perspective to examine the economic, socio-political, and cultural aspects of globalization within the context of contemporary debates about the phenomenon.
Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 Lab: 0 Credits: 3

PA 560
Political Economy
This course is an introduction to political economy exploring the relationship between economy and government or political system. Role of the state, role of the market, and impact of economic ideologies on political and economic systems will be examined. Structure of political and economic interests and the mediating effects of institutions on political and economic outcomes will be examined. Normative issues connected to ideal political and economic institutions and outcomes will be examined. The impact of the political and economic institutions on the problems of public administration at both the national and state level will be covered as well as the appropriate role for administrators, elected officials, and private sector leaders in the formulation of political and economic policy.
Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 Lab: 0 Credits: 3

PA 561
The Political Process and Administration
This course addresses the relationship between democratic institutions and processes of American politics and the administrative agencies of government. It also examines obligations of citizenship, influence of private interests (especially economic) on public purposes, and effects of demographic, economic, and technological change on self-government.
Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 Lab: 0 Credits: 3

PA 562
Urban and Metropolitan Government
This course analyzes the decision-making process in urban and metropolitan government. It is designed to emphasize the role of elected and appointed officials, business, organized labor, community organizations, and the electorate. It also focuses on the major problems of city-suburban relations.
Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 Lab: 0 Credits: 3

PA 563
Nonprofits and the Public Sector
This course considers the role played by the nonprofit sector in the larger American society and economy. Topics include major organizational forms, financial management, human resource policies, leadership, board-executive relations, and private-public connections.
Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 Lab: 0 Credits: 3

PA 564
Regulatory Policy and Politics
This course examines the changing role of government regulation of private and public activities from a political and administrative perspective. It also explores the reasons for growth and reform of economic and social regulation and investigates the regulatory process including standards for rule-making and the involvement of organized groups and the courts.
Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 Lab: 0 Credits: 3
PA 568
Strategic Competitiveness in the Public Sector
This course is a strategy, competitiveness, and leadership laboratory for public sector managers and leaders of the 21st century. Students will gain an understanding of IIT Stuart’s unique core concept of strategic competitiveness as well as frameworks from theories of entrepreneurial government, strategic management, and economic competitiveness. Students will critically analyze conventional frameworks for relevance to various contexts across the public sector in the rapidly changing Next Economy. Cases discussing the public sector’s efforts to transform its management processes to meet the challenges of the Next Economy and to successfully interact with the business community are emphasized. The course employs a dynamic classroom environment using case method, class discussions, and group projects. Students will appreciate the challenges, complexities, and characteristics needed to effectively lead and be successful in the competitive global economy by delving into questions such as: How do countries, regions, states, and cities compete in the global economy? How do public leaders create innovative economic development strategies by influencing firms’ strategic decisions regarding investment and trade? How can public leaders enhance the competitiveness of their business environment by adopting entrepreneurial government strategies? What are best practices for economic development in the Next Economy?
Lecture: 3 Lab: 0 Credits: 3

PA 570
Social Capital and the Community
The 21st century confronts the public sector with new challenges and opportunities. Many of these challenges and opportunities will take place on the community level, and many of those challenges and opportunities will be centered on the notion of social capital and the community. Social capital means the building of and use of community assets—those resources available to the community through its residents or citizens, association, institutions, and economic life. Using an asset-based community development approach, the objective of this course is to help the student understand and use the concepts of asset-based approaches to social capital and community as it relates to public administration.
Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 Lab: 0 Credits: 3

PA 577
Topics in Public Management
This reading and seminar will focus on a contemporary topic in public administration or policy. Subject matter will change in successive offerings of the seminar.
Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.
Credit: Variable

PA 578
Planning, Policy-Making, and the Built Environment
This course introduces students to governmental planning, policy-making, and their impact on the built environment. Using Chicago and nearby municipal areas as examples, the course acquaints students with the basic theories of urban and regional planning and development, and the regulatory tools and techniques used by government to impact the built environment. The course also includes material on housing, environmental protection, brownfields, historic preservation, new-urbanism and growth management, and various policy-making processes that determine governmental policies intended to influence the built environment.
Lecture: 3 Lab: 0 Credits: 3

PA 579
Ethics and Professional Responsibility in Public Service
This course focuses on the ethical problems and issues faced by individuals in public service organizations. It also examines questions related to corruption, abuse of power, financial impropriety, ethics codes and standards in government and professional fields, whistle-blowing, and other topics related to front-page concerns and individual problems of conscience and judgment. The course traces the growth of concern about the standards of ethical behavior in government in the U.S.
Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 Lab: 0 Credits: 3

PA 580
Policy Evaluation Analytics
This course will present a variety of tools and techniques to evaluate existing programs and policies to determine and measure their most important elements, and to give policy-makers the necessary information to fund, improve or terminate programs based on empirical evidence regarding factors such as cost/benefit, efficiency, effectiveness, equity, and other important characteristics. Evaluation can also allow policy-makers and staff to focus budgets and efforts to best achieve policy or program goals.
Lecture: 3 Lab: 0 Credits: 3

PA 581
Policy Design Analytics
This course is designed to present practical, cost-effective techniques that can be used to make better decisions regarding the allocation of scarce resources. Topics covered include problem identification, goal development, data needs and collection, generation of alternative solutions, projecting impacts, goals-oriented evaluation, and strategies for implementation.
Prerequisite(s): PA 501
Lecture: 3 Lab: 0 Credits: 3
PA 588
Incident Response, Disaster Recovery, and Business Continuity
Students learn to design and manage key business information security functions including incident response plans and incident response teams; disaster recovery plans; business continuity plans; and crisis management teams and plans. Reporting, response planning, and budgeting are all addressed. Students working in teams will prepare an incident response, disaster recovery, business continuity, or crisis management plan for a real world organization such as a business or a government body or agency.
Prerequisite(s): PA 501*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 Lab: 0 Credits: 3

PA 590
Internship in Public Administration
This course provides practical experience in public administration and may be taken only by students lacking extensive work experience in governmental administration.
Prerequisite(s): PA 501
Credit: Variable

PA 592
Directed Readings in Public Administration
This course consists of independent reading and analysis centered on particular problems and supervised by a member of the public administration faculty.
Credit: Variable

PA 597
Special Problems
The subject matter of this course will vary with the interests and the background of the students and the instructor, and the course may be taken more than once. Instructor permission is required.
Lecture: 3 Lab: 0 Credits: 3

PA 599
Integrative Practicum for Effective Leadership in Public and Nonprofit Organizations
PA 599 is a capstone course where students apply concepts and theories they have studied to analyze an organizational or policy problem and deliver a report that normally specifies the problem or task, defines alternatives, and proposes recommended course of action. The recommendation will be supported by reasons and evidence. PA 599 should be taken in the student's last semester.
Prerequisite(s): PA 580*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 Lab: 0 Credits: 3