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**To:** [cogdell@math.ohio-state.edu](mailto:cogdell@math.ohio-state.edu)  
**Cc:** [Soave, Melissa](#); [Smith, Randy](#); [Elliot Slotnick](#); [cowley.11@osu.edu](mailto:cowley.11@osu.edu)  
**Subject:** City and Regional Planning: MS., Ph.D., and Graduate Minor  
**Date:** Monday, July 04, 2011 12:02:00 PM

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Dear Jim,

I am writing to release to CAA for Subcommittee D's review and presentation three graduate programs from the Knowlton School of Architecture in City and Regional Planning, specifically, the Master's and Doctoral degree programs and a newly developed [C@RP](#) Graduate Minor Program.

To summarize our Committee's review, I can report that the Master's (MS) program was approved in its initial vetting back in April with no concerns raised. Since we had a few questions about the Ph.D. and the Graduate Minor programs, we have held the MS. until now so that the [C@RP](#) programs could be sent forward as a complete package. We are now ready and happy to do so. Our questions and the satisfactory answers that we have received in response are summarized below.

#### [C@RP Graduate Minor:](#)

Our Committee noted that the Minor proposal was clear and well thought out, offering appropriate justification for what is a new Graduate Minor program with a demonstrable need. A question was raised about the sufficiency of requiring only one (of three) core classes for granting the Minor, the classic depth versus breadth question that always arises in vetting such programs. The program offered strong justification for requiring only one core course, indicating that most Minor programs would be seeking depth in a C@RP specialty area. The Committee also took note that the proposal allowed for C- grades to be counted towards the Minor program while Graduate School rules require grades of B or better (or an S grade) for course inclusion. The program has made the necessary correction in this requirement. Finally, minor issues of clarification in the Additional Requirements, Administration and Advising sections of the proposal were raised and addressed to the Committee's satisfaction.

#### [C@RP Ph.D.:](#)

Our Committee noted that an unusually large number of credit hours (27) were being required post-candidacy and that the program itself was targeted for considerably more hours than the Graduate School minimum. Relatedly, students were projected to take 15 hours/semester throughout their pre-candidacy period which was close to the Graduate School maximum (16) before permission was required. A lack of clarity was noted in the proposed Transition Policy and questions were raised about the scope of the transition and the necessity for bridge courses.

The Committee was satisfied with the clarification and elaboration offered in the program response. Specifically, the large credit hour requirement for post-candidacy enrollment reflected a semester conversion model premised on 135 quarter hours, not the revised 120 quarter hours as the Graduate School minimum. Thus, in conversion, 90 hours was viewed as the minimum requirement, instead of 80. The program's post-candidacy registration requirement has been adjusted (5/semester) in recognition of the 80 hour minimum requirement for the doctorate. While the program has indicated that 5 hours per semester (still above the Graduate School requirement) is necessary to reach the overall degree requirement (80), we would recommend that the program consider reducing further the post-candidacy requirement to the minimum 3 hour enrollment while finding alternative and, perhaps, more appropriate mechanisms (such as research and independent study hours) to bring students to

the 80 hour doctoral enrollment requirement most cost-efficiently. This would seem to be fairly easy to accomplish in a program that features considerable enrollment in educational learning experiences that are not offered in traditional didactic classroom teaching settings.

In addition to addressing our post-candidacy/program credit hour concerns, the normal utilization of a 15 hour semester course load was also satisfactorily justified. Finally, the admittedly unclear Transition Policy was clarified and, it was underscored to the Committee's satisfaction, that the small program size allowed for both customization of transition plans to meet each student's needs and, as well, that bridge coursework was neither necessary nor feasible.



College of Engineering

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Date: 17 February 2011


To: Randy Smith  
Vice Provost, Office of Academic Affairs

From: Ed McCaul  
Program Director, Undergraduate Education and Student Services

Subject: Semester Conversion Proposal for the new Graduate Minor in City and Regional Planning

Attached is a letter from Ann Pendleton-Jullian, Director Knowlton School of Architecture, which discusses their new Graduate Minor in City and Regional Planning. This proposal has been reviewed by the College of Engineering and after some changes have been made to it the college is recommending that the Council on Academic Affairs approve it. If you have any questions concerning this proposal please let me know.

Date: 15 February 2011

From: Ann Pendleton-Jullian, Director   
Knowlton School of Architecture

To: Ed McCaul, Program Director  
Academic Affairs/Student Services  
College of Engineering

Subject: City and Regional Planning Semester Conversion Materials

The City and Regional Planning Section within the Knowlton School of Architecture is submitting the portion(s) of its semester conversion program templates that are checked below:

- Undergraduate minor in City and Regional Planning program template
- BS in City and Regional Planning program template
- Master of City and Regional Planning program template
- PhD in City and Regional Planning program template
- Appendices that include:
  - a proposal for a new graduate minor in City and Regional Planning

I endorse the contents of the enclosed program template(s). If you need further clarification or have any questions regarding the submitted materials, please do not hesitate to contact me and City and Regional Planning Section Head Jennifer Cowley. Note that the Knowlton School of Architecture does not have a uniform GE curriculum across its three Sections. Each Section develops a GE curriculum consistent with its particular undergraduate major program.

## **APPENDIX: Proposal for Graduate Minor in City and Regional Planning**

**Sponsoring Unit:** Offered by City and Regional Planning  
in the Knowlton School of Architecture

**Contact Person:** Jennifer Evans-Cowley, Section Head City and Regional Planning  
292-5427; Cowley.11@osu.edu

### **Development of the Minor**

City and Regional Planning offers a large number of dual degrees such as Master of City and Regional Planning (MCRP)/Master of Arts in African-American and African Studies, MCRP/Juris Doctorate, MCRP/Master of Arts in Geography, MCRP/Master of Science in Environmental Sciences, MCRP/Master of Landscape Architecture, MCRP/Master of Social Work, MCRP/Master of Science in Civil Engineering, and MCRP/Master of Arts in Public Policy. These dual degree programs support students who wish to combine their interests across two disciplines. However, dual degrees require additional credit hours and often extend the length of time a student is in graduate school. City and Regional Planning has had regular interest from graduate students in another major wishing to take classes in City and Regional Planning. Students on occasion ask whether it is possible to minor in City and Regional Planning as a supplement to their major, rather than obtaining a dual degree. The City and Regional Planning faculty over the last several years have discussed the possibility of creating a graduate minor to support students interest. Throughout the winter of 2010 the faculty met to develop a graduate minor proposal. On April 10<sup>th</sup>, 2010 the faculty voted unanimously to approve the proposed minor.

### **Potential Audiences**

There are two key potential audiences for the minor. The first group are those who have a strong interest in pursuing a dual Master's degree, but for whatever reason decide not to finish the entire dual degree program. For example, completing the MCRP/Master of Landscape Architecture program can take four years, while a minor in City and Regional Planning with a Master of Landscape Architecture could be completed in three years. The second audience includes those with an interest in city and regional planning who wish to add city and regional planning courses to support their doctoral studies. This for example would include doctoral students with a major field of study in another discipline who wish to add city and regional planning as a minor field.

## Learning Goals

The key learning goal of the minor in city and regional planning is for students to demonstrate a basic understanding of city and regional planning. This will be achieved by introducing students to a body of knowledge in city and regional planning that is most suited to the students interests. The minor in City and Regional Planning major seeks to introduce students to a mix of following bodies of knowledge:

a) **An understanding of human settlement as it relates to planning, based on knowledge of the relevant concepts and theories including:**

Social sciences (history, economics, sociology, political science, anthropology, psychology, geography): knowledge of the social and spatial structure of urban and regional systems, local public finance, economics of development, infrastructure provision and effects of globalization.

Environmental sciences (biology, ecology, environmental studies): knowledge about ecological and physical systems in relation to human activity at different geographic scales.

Design arts (architecture, landscape architecture, art, urban design): knowledge about the relationship between the design of the built environment and its functional, aesthetic and social precedents and consequences.

Legal Studies: knowledge about constitutional rights and principles, state and local government law, administrative rules and regulations, especially those focusing on the use and taxation of land.

b) **An understanding of historical and contemporary planning practice, policy and processes based on knowledge of the relevant concepts and theories pertaining to:**

Ethics: Understand and apply the purpose and meaning of planning and its ethical, visionary, and normative imperatives.

History: Understand the history of urban planning practice and the development of urban planning professional in the United States and abroad.

Institutions: Understand the economic, social and political institutions that both shape and respond to plans and planning related activities; including knowledge of the economic, social, and political institutions that influence planning and are susceptible to purposeful change. This includes knowledge of institutions across scale (e.g. local to global) and sector (e.g. public, private and nonprofit).

Methods: Knowledge of methods that anticipate and envision future changes to society and the built environment, such as forecasts, risk assessment futures scenarios and other tools for creating plan alternatives.

Plan making: Understand how to create, and use knowledge of comprehensive and other types of plans. Use ideas about the creation of plans, programs or projects to prepare an individually crafted product for a specific planning purpose and audience; demonstrating skill and judgment preparing a planning project that meets minimum professional standards?

Implementation: Understand and know how to use techniques for the adoption and implementation of plans and related policy including knowledge of relevant regulations (zoning, review processes), incentives, techniques (public finance and capital budgeting) and technologies, and knowledge of agencies conducting planning or employing planners.

Advocacy (Practices): Know the ways in which planners and planning practice have succeeded in altering the policies, institutions, and decisions that oppose the needs of disadvantaged persons.

Environmental Planning: Understand and use the laws and policies relating to environmental planning and principles and scientific support for assessing the capacity of natural and built resources

c) **Possess the skills needed to practice planning in a variety of venues in ways consistent with the ethical norms for planning including:**

Problem Solving: use problem solving skills to select, diagnose and solve relevant aspects of a complex planning problem including attention to the needs and interests of diverse stakeholders and the guidance provided by conceptual and empirical expertise.

Research Methods: Understand and use research skills to identify, test and evaluate empirical relationships between various aspects of urban settlements, or plans and policy outcomes, and to conduct such research from conception to completion.

Communication: Be able to use written, oral and graphic skills to compose clear, accurate and compelling text, images, and maps in documents and oral presentations.

Have the ability to prepare plans in print and multimedia format.

Analysis (Quantitative Analysis and Forecasts): Ability to understand and use of numerical reasoning and computational skills to conduct quantitative analysis of social and geographic information for basic professional planning purposes, problems and projects. Use forecasts and scenarios to anticipate and describe future changes in society and the built environment.

Collaboration: Collaborate with peers to produce a plan or planning product for a relevant professional clientele, to mediate disagreements, to interpret contested purposes, and to negotiate between diverse and competing interests.

Work with diverse communities: especially communities consisting of disadvantaged groups and persons and racial and ethnic minorities, or immigrant communities. Understand, compare and respect social, historical and ecological legacies that accompanies urban

settlement across the globe including the values of social equity, cultural and historical preservation and environmental conservation and sustainability.

**d) Understand the different values and ethical standards affecting the practice of planning, demonstrating knowledge for:**

Goal formulation: comprehending and discriminating among the goals that an individual, group, community and organization holds when considering the future including the values of justice, equity, fairness, efficiency, order and beauty.

Democratic decision making: assessing and choosing among different forms of democratic decision making that support and improve the quality of plans and planning related activity including the values of fair representation, equal opportunity and non discrimination by race, ethnicity, gender, age, religion, nationality, sexual orientation or disability.



### **Model Curriculum**

Students will be required to complete one of three core courses. The choices in core courses ensure that students will gain some exposure to history, theory or methods in city and regional planning. The remainder of the courses will be electives. Students are required to complete 12 credit hours in City and Regional Planning to fulfill the minor requirement. The curriculum is designed to be flexible to allow students to take courses that most meet their interests in city and regional planning.

### **Required Courses (3 credit hours)**

Students must take one of the following. Note that none of these courses have a prerequisite.

- CRP 6000 Historical Foundations of Planning, 3
- CRP 6100 Participation and Advocacy in Planning, 3
- CRP 6500 Plan Making and Analysis Techniques, 3

### **CRP Electives (9 credit hours)**

The remaining credit hours are to be chosen from any City and Regional Planning courses at the 5000 or higher level. Some of these courses have prerequisites. Students would need to consider whether they meet the prerequisites before selecting the electives that are most appropriate for their interests.

- CRP 5070 Introduction to GIS, 4
- CRP 5300 Metropolitan and Regional Planning, 3
- CRP 5400 Planning for Housing, 3
- CRP 5420 Planning Places with People in Mind, 3
- CRP 5500 Energy Planning, 3
- CRP 5960 Design Competition (cross-listed with ARCH/LARCH), 3
- CRP 6010 Innovation in City and Regional Planning, 3
- CRP 6020 Historic Preservation Planning, 3
- CRP 6080 Advanced GIS for Professional Planning Practice, 4
- CRP 6110 Dispute Resolution in Planning, 3
- CRP 6193 Independent Studies, 1 - 15
- CRP 6194 Group Studies, 1 - 3
- CRP 6200 Graphic Visualization, 4
- CRP 6210 Planning Communications, 3
- CRP 6300 Law and Planning I: Land Use, 3
- CRP 6310 Law and Planning II: Environment and Society, 3
- CRP 6320 Seminar in Land Use Policy, 3
- CRP 6350 The Socially Just City, 3
- CRP 6400 Site Planning and Development, 4
- CRP 6410 Planning for Sustainable Development, 3
- CRP 6420 Infrastructure Planning, 3

- CRP 6430 Urban Design, 3
- CRP 6440 Research Methods for Urban Design and Planning, 3
- CRP 6450 Planning and Evaluating Environments for Human Use, 3
- CRP 6460 Real Estate Finance for Planners, 3
- CRP 6600 Spatial Models and Project Evaluation, 3
- CRP 6610 Grant Writing in the Public Sector, 3
- CRP 6620 Project Management in the Public Sector, 3
- CRP 6798 Planning Study Abroad, 1 - 15
- CRP 6800 Transportation Planning, 3
- CRP 6810 Non-motorized Transportation Planning, 3
- CRP 6820 Urban Transportation Demand Forecasting, 3
- CRP 6880 CRP Interdepartmental Seminar, 1 - 15
- CRP 6890 Workshop in City and Regional Planning, 1 - 15
- CRP 6910 Comprehensive Planning Studio, 6
- CRP 6920 Urban Design/Physical Planning Studio, 6
- CRP 6950 Transportation Studio, 6
- CRP 6960 Sustainability Studio, 6
- CRP 6970 International Development Studio, 6
- CRP 6998 Research in City and Regional Planning, 1 - 15

### **Core Course Descriptions**

#### CRP 6000 Historical Foundations of Planning

Explores the people, movements, and principles which have shaped contemporary planning practice. Examines what historical successes and failures mean for the future of planning.

#### CRP 6100 Participation and Advocacy in Planning

Ties planning theory to participation techniques and advocacy issues to help students understand possible choices for addressing community development and social issues related to city and regional planning.

#### CRP 6500 Plan Making and Analysis Techniques

Learn how to collect and analyze information used to make plans, including population projections and economic activity.

### **Additional Requirements**

1. No grade below a C- will be permitted in courses comprising the minor; the minimum overall GPA of the minor shall be a 3.0.
2. Transfer credit may not be applied to the minor.
3. Variations in the minor are generally not permitted; any variation must be approved by the Graduate Studies Chair
4. Students majoring in City and Regional Planning are not eligible to minor in City and Regional Planning.
5. A minor program form must be filed at least by the time the graduation application is submitted. It requires signature by the student and the student's major program advisor. This is then submitted to the advisor for the minor program for approval. Once the minor has been filed, any changes must be approved by the Graduate Studies Chair.

### **Administration and Advising**

The minor will be administratively supported by the City and Regional Planning program. The City and Regional Planning Section Head (or designee of the Section Head) will assure the advising of students review of courses and be responsible for on-going development of the minor. The Graduate Studies Chair will be responsible for approval of minor program forms.

### **Estimates of Student Interest and Needed Instructional Resources**

Although difficult to anticipate, demand for the minor is initially projected at 3-5 students per year. This would not require any additional courses or teaching resources. The core courses are offered on a regular basis and the addition of minors is expected to have minimal impact on class sizes. Should interest increase beyond projections, it is anticipated that the fiscal resources generated will be adequate to cover the additional expenses.

### **Student Learning Outcome Assessment Plan**

The Section Head (or designee of the Section Head) will be charged with assuring the assessment of the student learning outcomes. The Section Head will administer a minor completion survey. The survey will explore student perceptions of: 1) the attainment of the learning goal indicated for the minor, and 2) structure, availability, and appropriateness of courses in the minor. This data, along with enrollment data, will be reviewed by the Section Head.

### **Implementation Date**

The minor is proposed for implementation in Autumn Quarter of 2012.

### **Attachments**

- Attachment A – Core Course Syllabi
- Attachment B – Letters of Support

## Appendix A – Core Course Syllabi

### CRP 6000 Historical Foundations of Planning

Transcript Abbreviation: **Planning History**

25 word description: Explores the people, movements, and principles which have shaped contemporary planning practice. Examines what historical successes and failures mean for the future of planning.

Requirement/Requirement/elective designation: h designation: a MCRP, c CRP, g, h

Credit Hours: 3

Class Time Distribution: 3hours lecture

Undergraduate, graduate, or professional designation: Graduate

Intended rank of student: Masters

Length of course: Semester

Repeatable: No

Honors: No

Service Learning: No

Delivery mode: Classroom

Repeatable: No

Expected enrollment: 30

Number of sections: 1

Space needs: Classroom

Subject code: 040301

Subsidy code: M

Off-campus: No

Terms of offering: Autumn

Campus of Offering: Columbus

Available for credit by exam (EM): No

Technology Needs: None

Semester conversion designation: Semester equivalent of quarter course, CRP 643

Grading Plan: Letter

Prerequisites: graduate standing or permission of the instructor

Text and other materials: Mumford, L. *The City in History*; Legates, R. (editor) *The City Reader*; Levy, J. *Contemporary Urban Planning*

Topics:

Planned communities movements (2 weeks)

Regionalism (1 week)

Parks and the environment (1 week)

Transportation (1 week)

Urban Renewal and equity considerations (1 week)

New patterns of development (2 weeks)

Professional roots of planning (1 week)

Rational planning (1 week)

Alternatives to the rational model (2 weeks)  
Global planning history (1 week)  
Student presentations (1 week)

Course Goals/Learning Outcomes:

Familiarize students with the events that shaped U.S. planning practices

Evaluate new and historic plans to identify patterns of failure and strategies for success

Read, understand, and critique various writings, policies, and ideas concerning major problems facing cities in context of

Develop critical thinking skills we have developed as we have and how planning history and theory and form are interrelated

Identify key concepts in planning literature (history, theory) and ability to draw upon this knowledge in responding to specific planning issues.

Analyze planning history from a local context, linking movements and theories to Columbus.

Accreditation criteria met:

Social sciences (history, economics, sociology, political science, anthropology, psychology, geography) including knowledge of the social and globalization

The purpose and meaning of planning and its ethical, visionary, and normative imperatives.

History of urban planning practice and the development of urban planning profession in the United States and abroad.

Legal studies including knowledge about constitutional rights and principles, state and local government law, administrative rules and regulations, especially those focusing on the use and taxation of land.

The institutions that both shape and respond to plans and planning related activities: including knowledge of the economic, social and political institutions that influence planning and that are susceptible to purposeful change. At a minimum this study should include institutions across scale (e.g. local to global) and sector (e.g. public, private and nonprofit).

The creation, use, and knowledge of comprehensive and other types of plans.

Knowledge of the ways in which planners and planning practice have succeeded in altering the policies, institutions, and decisions that oppose the needs of disadvantaged persons.

Comparing and respecting the complex social, historical and ecological legacies that accompanies urban settlement across the globe including the values of social equity, cultural and historical preservation and environmental conservation and sustainability

Use written, oral and graphic skills to compose clear, accurate and compelling text, images and maps in documents and oral presentations.

## **CRP 6100 Participation and Advocacy in Planning**

Abbreviated Title: **Particip Advocacy**

25 word description: Ties planning theory to participation techniques and advocacy issues to help students understand possible choices for addressing community development and social issues related to city and regional planning.

Requirement/elective designation: a MCRP, c CRP, h

Credit Hours: 3

Class Time Distribution: 3 hours lecture

Intended rank of student: Masters

Undergraduate, graduate, or professional designation: graduate

Length of course: Semester

Repeatable: No

Honors: no

Service Learning: No

Delivery mode: Classroom

Repeatable: No

Expected enrollment: 30

Number of sections: 1

Space needs: Classroom

Subject code: 040301

Subsidy code: M

Terms of offering: Autumn

Campus of Offering: Columbus

Semester conversion designation: modified course CRP712 City Planning Theory

Grading Plan: Letter

Prerequisites: graduate standing or permission of the instructor

Available for credit by exam (EM): No

Technology Needs: None

Text and other materials: Creighton, James L. *The Public Participation Handbook: Making Better Decisions Through Citizen Involvement* 2005, and Friedmann, John. 1987. *Planning in the Public Domain: From Knowledge to Action.*; web materials; other readings.

Topics:

Introduction – ethics and disenfranchised populations (1 week)

Rational Model – public hearings (1 week)

Incremental/Mixed Scanning – participatory design processes (2 weeks)

Advocacy /Equity Planning – pluralistic plans (2 weeks)

Transitive and Radical Planning – focus groups, community organizing, etc. (2 weeks)

Midterm (1 week)

Communicative Planning – consensus building (2 weeks)

Empowerment – planner as educator and facilitator (1 week)  
Coalition building (1 week)  
Ethics in planning practice (1 week)

Course Goals/Learning Outcomes:

Understand how disenfranchised populations are affected by different planning practices.  
Knowledge of the code of ethics and ethical dilemmas underlying planning in the US.  
Knowledge of various theories of planning and associated public participation techniques.  
Ability to make personal choices about planning theory and ethics.

Accreditation criteria met:

Historical/contemporary planning practice, policy and theory  
Ethics/values  
Written, oral and graphic skills  
Collaborating with peers  
Techniques for adoption of plans  
Work with diverse communities  
Different democratic decision making processes

social sciences (history, economics, sociology, political science, anthropology, psychology, geography) including knowledge of the social and globalization

the purpose and meaning of planning and its ethical, visionary, and normative imperatives.

history of urban planning practice and the development of urban planning profession in the United States and abroad.

the institutions that both shape and respond to plans and planning-related activities: including knowledge of the economic, social and political institutions that influence planning and that are susceptible to purposeful change. At a minimum this study should include institutions across scale (e.g. local to global) and sector (e.g. public, private and nonprofit).

knowledge of the ways in which planners and planning practice have succeeded in altering the policies, institutions, and decisions that oppose the needs of disadvantaged persons.

use problem solving skills to select, diagnose and solve relevant aspects of a complex planning problem including attention to the needs and interests of diverse stakeholders and the guidance provided by conceptual and empirical expertise.

use techniques for the adoption and implementation of plans including relevant regulations, incentives, techniques and technologies.

work with diverse communities, especially communities consisting of disadvantaged groups and persons and racial and ethnic minorities, or immigrant communities.

comprehending and discriminating among the goals that an individual, group, community and organization holds when considering the future including the values of justice, equity, fairness, efficiency, order and beauty.

assessing and choosing among different forms of democratic decision making that support and improve the quality of plans and planning related activity including the values of fair representation, equal opportunity and non-discrimination by race, ethnicity, gender, age, religion, nationality, sexual orientation or disability.

comparing and respecting the complex social, historical and ecological legacies that accompanies urban settlement across the globe including the values of social equity, cultural and historical preservation and environmental conservation and sustainability

### **CRP 6500 Plan Making and Analysis Techniques**

Abbreviated Title: **Plan Techniques**

25 word description: Learn how to collect and analyze information used to make plans, including population projections and economic activity.

Requirement/elective designation: a MCRP, c CRP, h

Credit Hours: 3

Class Time Distribution: 3 hours lecture

Intended rank of student: Masters

Undergraduate, graduate, or professional designation: graduate

Length of course: Semester

Repeatable: No

Honors: no

Service Learning: No

Delivery mode: Classroom

Repeatable: No

Expected enrollment: 30

Number of sections: 1

Space needs: Classroom

Subject code: 040301

Subsidy code: M

Off-campus: No

Terms of offering: Spring

Campus of Offering: Columbus

Semester conversion designation: modified course CRP762 Data and Forecasting and CRP 771

Applications of Quantitative Methods in Planning

Grading Plan: Letter

Prerequisites: graduate standing or permission of the instructor

Available for credit by exam (EM): No

Technology Needs: None



Text and other materials: Klosterman, Richard E. 1990. *Community Analysis and Planning Techniques*. Roman and Littlefield Publishers. Savage: Maryland.

Oppenheim, Norbert 1980. *Applied Models in Urban and Regional Analysis*. Prentice-Hall, Inc. Englewood Cliffs: New Jersey.

Nelson, A. 2004. *Planner's Estimating Guide: Projecting Land-Use and Facility Needs*. APA Planners Press.

Topics:

Basic Statistics

Extrapolation Techniques and Projections..

Population Projections with the Cohort-Component Technique.

Employment Projections: Economic Base and Shift-Share Analysis.

Input-Output Analysis.

Land Use and Travel Demand: Introduction to the Gravity Model

Course Goals/Learning Outcomes:

Students will understand:

Concepts of hypothesis testing

Regression analysis

Cohort component population projection

Economic base and shift share analysis

Input-Output analysis

Gravity model and its application

Accreditation criteria met:

Envisioning the future

Problem solving

Research skills

Written, oral and graphic skills

Numerical reasoning

Collaborating with peers

Use of forecasting and scenarios