

**PROPOSED REAL ESTATE
CURRICULA FOR
NOVGOROD PARTNERSHIP
FOR FREEDOM PROJECT**

Prepared for



Prepared by
Austin Jaffee

Housing Sector Reform Project II
Project 110-0008
U.S. Agency for International Development, USAID/Moscow
Contract No. EPE-0008-Q-00-5120-00, Task Order No. 4



THE URBAN INSTITUTE

2100 M Street, NW
Washington, DC 20037
(202) 833-7200
www.urban.org

November 1997
UI Project 06612-004

PROPOSED REAL ESTATE CURRICULA FOR NOVGOROD PARTNERSHIP FOR FREEDOM PROJECT

In response to the USAID request, enclosed please find *five* real estate curricula to be used in conjunction with the on-going activities with Novgorod State University. These curricula have been developed as alternative concepts for future real estate programs. They are stylized structures which may be modified in a variety of ways. The various programs have been developed to permit discussion and consideration at a number of levels and may be tailored to fit specific conditions in Russia.

The five curricula are as follows:

- ! **1. Bachelor of Science Degree in Real Estate** (15 Courses Required). This undergraduate program was developed as a multiple year program with three foundation courses, three levels of real estate courses, and a final project.
- ! **2. Certificate/Diploma in Real Estate** (9 Courses Required). This post-graduate option is viewed as a set of professionally-based courses in two levels for mid-level managers seeking specialized training at a university in real estate over a relatively concise time period.
- ! **3. Masters Degree in Real Estate** (16 Courses Required). This two year masters-level degree program uses many of the same real estate courses as the proposed Certificate/Diploma program but extends the coverage to include a set of advanced courses, academic seminars, and a thesis.
- ! **4a. and 4b. Minimal Course Plans** (5 Courses Required). These two alternative options, one at the undergraduate level and the other at the masters level, are proposed if only a few courses are to be developed. In each case, five courses are chosen based on their perceived value to students at each level.

There are several structures to the numbering scheme and sequencing of courses. Note that for any of the proposed curricula, the key topics are real estate *finance*, *investment analysis*, and *development*. Note also that economic analysis and quantitative methods are fundamental parts of these programs. Government regulations and public policies are important complements to the decidedly private sector perspective. In addition, the focus of all of the programs is hands-on and applied yet rigorous, stemming from the perceived body of knowledge in the academic field of real estate. The more extensive programs would require a Final Project or Thesis, both viewed as capstone mechanisms to help bring closure to the programs. Finally, the Minimal Course Plans suggest the most important proposed courses if only a few courses can be scheduled by each level.

It is hoped that these curricular will be useful in further discussions about curricular development.

BACHELOR OF SCIENCE DEGREE IN REAL ESTATE
(15 Courses Required)

Foundation Courses (Choose 3 of 3)

- 100 Accounting and Business Practice
- 101 Introductory Economics
- 102 Introduction to Statistics

Basic Real Estate Courses (Choose 201 and 3 of 4 others)

- 201 Introduction to Real Estate Analysis
- 202 Regional and Urban Economics
- 203 Real Estate Law
- 204 Real Estate Brokerage and Marketing
- 205 Property Management and Maintenance Policies

Intermediate Real Estate Courses (Choose 4 of 4)

- 301 Real Estate Valuation
- 302 Real Estate Finance
- 303 Real Estate Investment Analysis
- 304 Real Estate Development

Advanced Real Estate Courses (Choose 2 of 4)

- 401 Urban Land Economics
- 402 Government Regulations and Land Use Controls
- 403 Computer Applications in Real Estate
- 404 Special Topics

Final Project (Choose 2 of 2)

- 499 Individual Project in Real Estate (counts double)

CERTIFICATE/DIPLOMA IN REAL ESTATE
(9 Courses Required)

Foundation Real Estate Courses (Choose 4 of 4)

- 501 Introduction to Real Estate Analysis
- 502 Regional and Urban Economics
- 503 Real Estate Law and Land Use Issues
- 504 Real Estate Brokerage, Property Management and Valuation

Advanced Real Estate Courses (Choose 5 of 5)

- 552 Real Estate Finance
- 553 Real Estate Investment Analysis
- 554 Real Estate Development
- 570 Quantitative Analysis for Real Estate Research
- 590 Advanced Topics in Real Estate

MASTERS DEGREE IN REAL ESTATE
(16 Courses Required)

Foundation Real Estate Courses (Choose 4 of 4)

- 501 Introduction to Real Estate Analysis
- 502 Regional and Urban Economics
- 503 Real Estate Law and Land Use Issues
- 504 Real Estate Brokerage, Property Management and Valuation

Secondary Real Estate Courses (Choose 3 of 3)

- 552 Real Estate Finance
- 553 Real Estate Investment Analysis
- 554 Real Estate Development

Advanced Real Estate Courses (Choose 2 of 3: either 561 or 562 and 571)

- 561 Urban Land Economics
- 562 Government Regulations and Land Use Controls
- 571 Research Methods for Real Estate Research

Seminars in Real Estate (Choose 5 of 7)

- 591 Seminar in Real Estate Valuation
- 592 Seminar in Real Estate Finance
- 593 Seminar in Real Estate Investment Analysis
- 594 Seminar in Real Estate Development
- 595 Seminar in Property Management and Marketing
- 596 Independent Studies
- 597 Special Topics

Thesis (Choose 2 of 2)

- 599 Thesis in Real Estate (counts double)

MINIMAL COURSE PLANS
(5 Courses Required)

Undergraduate Level (Choose 5 of 5)

- 201 Introduction to Real Estate Analysis
- 301 Real Estate Valuation
- 302 Real Estate Finance
- 303 Real Estate Investment Analysis
- 402 Government Regulations and Land Use Controls

— *and* —

Masters Level (Choose 5 of 5)

- 552 Real Estate Finance
- 553 Real Estate Investment Analysis
- 554 Real Estate Development
- 561 Urban Land Economics
- 597 Special Topics

PROPOSED COURSE LIST

- 100 Accounting and Business Practice
- 101 Introductory Economics
- 102 Introduction to Statistics

- 201 Introduction to Real Estate Analysis
- 202 Regional and Urban Economics
- 203 Real Estate Law
- 204 Real Estate Brokerage and Marketing
- 205 Property Management and Maintenance Policies

- 301 Real Estate Valuation
- 302 Real Estate Finance
- 303 Real Estate Investment Analysis
- 304 Real Estate Development

- 401 Urban Land Economics
- 402 Government Regulations and Land Use Controls
- 403 Computer Applications in Real Estate
- 404 Special Topics
- 499 Individual Project in Real Estate (counts double)

- 501 Introduction to Real Estate Analysis
- 502 Regional and Urban Economics
- 503 Real Estate Law and Land Use Issues
- 504 Real Estate Brokerage, Property Management and Valuation
- 552 Real Estate Finance
- 553 Real Estate Investment Analysis
- 554 Real Estate Development
- 561 Urban Land Economics
- 562 Government Regulations and Land Use Controls
- 570 Quantitative Analysis for Real Estate Research
- 571 Research Methods for Real Estate Research
- 590 Advanced Topics in Real Estate
- 591 Seminar in Real Estate Valuation
- 592 Seminar in Real Estate Finance
- 593 Seminar in Real Estate Investment Analysis
- 594 Seminar in Real Estate Development
- 595 Seminar in Property Management and Marketing
- 596 Independent Studies
- 597 Special Topics
- 599 Thesis in Real Estate (counts double)

PROPOSED COURSE SYLLABI

100 Accounting and Business Practice

This course is intended to provide a foundation in financial and managerial accounting. In addition, principles of sound business practice and management strategy should be covered to permit decision makers to work in organizations and manage operations consistent with modern business practice. A survey of accounting and management terms and practices should also be included.

101 Introductory Economics

This course is an introduction to the market economy. Principles of microeconomics (price theory) and macroeconomics (fiscal and monetary policy) should be analytically taught as a foundation for further economic analysis of real estate markets. Topics should also include the effects of governmental policies on markets, discussions of market institutions, and applications of welfare economics.

102 Introduction to Statistics

An overview of classical statistical analysis is a necessary tool for modern real estate analysis. Probability theory, sampling methods, descriptive statistics, hypothesis testing, regression models, and applied topics should be covered. The interpretation of statistical data should be covered and the use of statistical software packages would provide a hands-on approach.

201 Introduction to Real Estate Analysis

This course is viewed as an introduction to the field of study, the business, and the assets: land and improvements. This introductory course should establish the framework for the specialized courses which follow. Topics should include definitions of the assets, descriptions of the basic tools of the trade, a discussion of the special characteristics of real estate and real estate markets, an overview of the development of the real estate industry, an assessment of the unique features found in real estate markets, the special legal aspects to real estate analysis, and the relationship between real estate and the general market economy.

202 Regional and Urban Economics

Given the fixed nature of land, it is important to understand the relationship between regional and urban change and the individual real estate site. The sub-field of regional and urban economics has developed a lengthy body of knowledge within economics dealing with several aspects of this relationship. Topics include regional and city growth, industrial and residential location theories, determination of rent,



accessibility and land use, and other aspects of spatial economics. Policy issues are also important in this course since many land use policies are regional or local in nature and enforcement tends to be localized in most countries.

203 Real Estate Law

The legal regulation of land and improvements has a long tradition dating back to antiquity. Modern real estate analysis requires an understanding of several aspects of property law including legal interests and estates, public and private limitations on ownership, alternative forms of ownership, concurrent interests, titles, deeds and other ownership documents, land descriptions and measurement, cadastral surveying, recording and land information systems, contracts, listing and sales agreements, and landlord-tenant laws. This course should be *descriptive* of the current environment (which varies dramatically around the world, country-by-country) and *prescriptive* to consider future changes. The emphasis should be on understanding the nature of the legal instruments and other institutions as well as on the effects of these tools on real estate markets and participant behavior.

204 Real Estate Brokerage and Marketing

The transference of real property rights is generally accomplished via brokerage systems. Since markets often exhibit high transaction costs, real estate marketing strategies are essential for successful business practice. This course should develop the process of selling and brokering real estate as a process. Topics should include the role of brokers in real estate markets, legal aspects of brokerage, principles of real estate agencies, types of brokerage operations, compensation schemes, successful strategies as a professional broker, real estate market analysis, real estate market research, marketing policies and strategies.

205 Property Management and Maintenance Policies

Housing and other real estate assets do not manage themselves. In fact, property or asset management is one of the most overlooked areas in many real estate markets. While customs and practices vary worldwide, successful professional managers follow a set of principles and practices. Topics in such a course include the role and importance of the property manager in real estate markets, the property management function, the management contract agreement, managing different types of real estate assets, special problems in special properties, development of a management plan, budgeting and performance measures for managers, the establishment of a maintenance program, the cost-benefit analysis of maintenance policies, and selling management and maintenance programs to owners and tenants.



301 Real Estate Valuation

One of the primary functions of real estate specialists is to estimate the value of property rights. Appraisers (or valuers) are asked to provide such estimates. There is a long literature on the principles, methods, and practices of professional appraisers. Topics should include key definitions such as value, price, and cost, principles of value such as change, anticipation, competition, supply and demand forces, substitution, and others, the valuation process, collecting and analyzing market data for valuation purposes, determination of highest and best use, estimating the value of land, traditional valuation methodologies, the practice of real estate appraisal, appraising for tax purposes, income-property valuation, and statistical approaches to real estate valuation.

302 Real Estate Finance

The growth and importance of real estate finance in modern analysis cannot be overstated. Both at the *macroeconomic* level (in terms of the financial system and its impact on real estate markets) and at the *microeconomic* level (in terms of individual decision making and analyses of real estate instruments), real estate financial considerations play an increasingly important role in today's real estate markets. Given the underdeveloped state of financial markets in transition economies, a strong emphasis on real estate finance is even more important. Macroeconomic topics should include an overview of the financial system including a description of financial institutions and the relationship between capital markets and real estate markets, government involvement in real estate finance, including the growth of the secondary mortgage market in the United States and elsewhere, and the analysis of fiscal and monetary policy and their relationships to real estate markets including interest rate policies, inflationary effects, international aspects of macroeconomic policies, and other issues. Microeconomic issues include the choice between using debt and equity capital as a homeowner and investor, analyzing financing options as a borrower, understanding mortgage financial calculations and rates of return, measuring the effects of leverage and other financial strategies in modern real estate analysis. Also, issues such as mortgage underwriting, alternative mortgage instruments, and mortgage brokerage should be covered.

303 Real Estate Investment Analysis

Once a valuation estimate is made and financing options are investigated, an investor is ready to make decisions about acquisitions. In market economies, investment decisions are made in a world of risk and uncertainty. Both expected returns and various types of risk must be evaluated. This course develops a general framework for evaluating real estate risks and returns on a systematic basis. Topics

include establishing the goals and objectives of the investor, evaluating real estate projects in an opportunity cost environment, using the time value of money technology (taken from the previous course) to make investment decisions, using traditional investment models such as discounted cash flow techniques, measuring returns across alternative investments and across time, the impact of financing on real estate investment, the impact of income taxes on investment strategies, applying modern methods of analysis, and comparing investment prospects to empirical evidence.

304 Real Estate Development

The transformation of raw land into a finished real estate project encompasses a wide range of skills. Real estate development is the entrepreneurial process in real estate entailing the greatest amount of risk because of its broad scope of activities. When viewed as a step-by-step process, the amount of risk can be curtailed and perhaps mitigated. This course would require professional expertise and an understanding of the development process including an understanding of the objectives, players, and the process itself. Given differences from country to country, it would be essential to have local expertise to ensure that local practices are followed. Real estate development involves skills including vision and conception, design and assessment, estimation of physical and financial feasibility, building a development team, contract negotiations, obtaining commitments, construction management, management of real estate operations, and implementation of a long-term management operation.

401 Urban Land Economics

As one of the advanced real estate topics, this course is intended to supplement the financial analysis-type courses relevant to students of real estate markets. Urban land economics is distinguished from classical economics as well as regional and urban economics by emphasizing the institutional character of urban land markets and the importance of land as a societal resource, often containing a strong policy orientation dealing with issues such as housing, commercial development, transportation, and urban public finance issues. This course should be designed to build upon the principles developed in earlier economics courses in a very applied manner.

402 Government Regulations and Land Use Controls

Throughout the world, governments regulate land in one form or another. Any attempt to develop a broad-based real estate curriculum must include treatment of government's use of regulatory powers to control, modify, and manage the use of land. In many countries, these regulations are local in nature; sometimes, however,



there are national or federal rules which impact the real estate decision maker. Often the regulations are referred to as land use controls since they tend to be similar in objective and nature. Typical land use controls in most market economies include zoning, building codes, subdivision and building regulations, health and safety standards, rent controls, growth limitations of communities, and other regulations. However, other regulations such as land taxation, government permitting, environmental issues, etc. are also appropriate.

403 Computer Applications in Real Estate

The rise of microcomputers as a modern business tool in real estate suggests that a course devoted to real estate applications using computers would be a helpful addition to the curriculum. While computer applications might be introduced as needed across the courses, devoting a separate course to this topic permits some additional attention be paid to the interface between user and machine. Typical applications would include spreadsheet and canned software to perform real estate financial analysis, statistical analysis of real estate models, time series studies of rates of return in real estate markets, Monte Carlo simulation as real estate risk analysis, portfolio theory applications, option pricing approaches in real estate, GIS applications for real estate brokerage, and others.

404 Special Topics

This course would add flexibility to the curriculum by enabling special topics to be introduced and developed as needed. The intent is to enable unique offerings to have a place within the structure of the curriculum as they develop. In addition, this mechanism can be used to delve into one or more topics in greater detail than can be accomplished in a single course. For example, as an extension of Real Estate Finance, it might be useful to develop a course in secondary mortgage markets as this institutional development becomes more prevalent throughout the world. It is intended that the subject matter of this course would vary from offering to offering.

499 Individual Project in Real Estate (counts double)

This course is intended as a capstone project to be completed by the student with staff supervision. It is suggested that it count for more than one course (proposed as a double course) to signal to the student that this is a major portion of the curriculum. It is also expected that completion of a project will require extensive time and commitment so that double credit is warranted. Projects should be proposed, chosen, and supervised by staff and as a final requirement, the project would represent the culmination of effort of the program.

501 Introduction to Real Estate Analysis

This course is viewed as a graduate-level version of 201. The concept remains a course devoted to the introduction to the field of study, to the business, and to the assets: land and buildings. The emphasis would be more on analytical processes in the field compared with the descriptive approach used in 201. Similarly, though, this course would develop a framework to be used as a foundation for the more advanced coursework which follows.

502 Regional and Urban Economics

This course is viewed as a graduate-level version of 202. In this course, the emphasis should be more on the theory and evidence compared with 202. Similar topics should be discussed.

503 Real Estate Law and Land Use Issues

This course is viewed as a graduate-level version of 203 with some additional material taken from 402. Less attention should be paid in this course to some of the more descriptive details of legal instruments and institutions and more attention should be paid to broader issues compared with 203. The emphasis in this course should also be on practical legal issues affecting real estate markets.

504 Real Estate Brokerage, Property Management and Valuation

This course is viewed as a graduate-level compilation of material from 204, 205, and 301. This course is conceived of a survey of brokerage, management, and valuation, three key specializations in modern real estate markets. Emphasis should be on principles and practices which are successful in market economies throughout the world.

552 Real Estate Finance

This course is viewed as a graduate-level version of 302. While the scope of real estate finance continues to grow, the perspective here should be analytical in nature. Emphasis should be on the financial calculations and making financial decisions compared with the more descriptive nature of 302. An overview of the financial system is also important but the primary focus should be on developing technical expertise when making real estate finance decisions.

553 Real Estate Investment Analysis

This course is viewed as a graduate-level version of 303. Similar to the differences between 302 and 552, the differences between 303 and this course largely deal with the pedagogical approach adopted. In this course, students should become



competent to make real estate investment decisions. Case studies could be used, especially as there are numerous calculations to be considered. The primary focus should be on making various types of investment decisions.

554 Real Estate Development

This course is viewed as a graduate-level version of 304. This course differs from the earlier version in the expectation of the instructor about the scope and understanding of real estate development. More so than in other areas, the emphasis and focus in the real estate development courses (304 and 554) should be quite similar. Differences would stem from different levels of expertise of the students.

561 Urban Land Economics

This course is viewed as a graduate-level version of 401. The perspective in this course is identical to 401 but the emphasis should be at a higher level if the qualifications of the student body is higher. Also, additional public policies can be treated at a faster pace than in the earlier course.

562 Government Regulations and Land Use Controls

This course is viewed as a graduate-level version of 402. The perspective in this course is identical to 402 but the emphasis should be at a higher level since the qualifications of the student body is higher. Also, additional government regulations should be discussed and evaluated in this course.

570 Quantitative Analysis for Real Estate Research

Real estate analysis has become increasingly quantitative in many markets. As a result, professional practitioners require expertise in quantitative methods of analysis. This is the first course proposed to provide such skills. The emphasis should be on the *use* of the method rather than the *derivation* of the approach. The perspective should be very applications oriented, using real-world data wherever possible.

571 Research Methods for Real Estate Research

Real estate analysis has become increasingly quantitative in many markets. As a result, professional practitioners require expertise in quantitative methods of analysis. This is the second (or more advanced) course intended to provide such skills. As in 570, the emphasis should be on the *use* rather than the *derivation* of the method. The perspective should also be very applications oriented, using real-world

data wherever possible. The level of rigorous and speed at which the applications are introduced should be higher in this course compared with 570.



590 Advanced Topics in Real Estate

This course is intended to provide an opportunity for additional study in topics of special interest. Proposed in some of the programs, the concept is to enable staff to treat controversial or immediate topics in a timely manner. Each year, the topic might well vary so that this mechanism can be used to keep the curriculum current. In addition, topics where there is insufficient time during the initial course can be treated in this course.

591 Seminar in Real Estate Valuation

This course is intended as a research seminar in real estate valuation. The format should permit small group discussion with staff and the presentation of research projects dealing with the leading valuation topics. Topics should vary from year to year.

592 Seminar in Real Estate Finance

This course is intended as a research seminar in real estate finance. The format should permit small group discussion with staff and the presentation of research projects dealing with the leading finance topics. Topics should vary from year to year.

593 Seminar in Real Estate Investment Analysis

This course is intended as a research seminar in real estate investment analysis. The format should permit small group discussion with staff and the presentation of research projects dealing with the leading investment topics. Topics should vary from year to year.

594 Seminar in Real Estate Development

This course is intended as a research seminar in real estate development. The format should permit small group discussion with staff and the presentation of research projects dealing with the leading development topics. Topics should vary from year to year.

595 Seminar in Property Management and Marketing

This course is intended as a research seminar in property management and marketing. The format should permit small group discussion with staff and the presentation of research projects dealing with the leading property management and marketing topics. Topics should vary from year to year.

596 Independent Studies

This course permits students to engage in special, independent studies, upon agreement with staff. If special projects are desired, the use of 596 is a mechanism for permitting the student to pursue a special project individually.

597 Special Topics

This course is viewed as a graduate-version of 404. Like 404, this course would add flexibility to a curriculum by enabling special topics to be introduced and developed as needed. It is intended that the subject matter of this course would vary from offering to offering.

599 Thesis in Real Estate (counts double)

This course is intended as a capstone project to be completed by the graduate student with staff supervision. It is suggested that it count for more than one course (proposed as a double course) to signal to the student that this is a major portion of the curriculum. It is also expected that completion of a project will require extensive time and commitment so that double credit is warranted. Projects should be proposed, chosen, and supervised by staff and as a final requirement, the project would represent the culmination of effort of the masters program.