

Tufts University's Urban & Environmental Policy & Planning Student Learning Outcomes

This document compiles the templates we used to aggregate the results of our assessment using our learning outcomes assessment instruments.

1. Assessment of Learning Outcomes Using Rubrics for Specific Class Assignments

The first set of tables include the templates we used to compile the results from our first year of assessing students' level of proficiency in policy and planning core competencies in four required core courses and the required thesis or capstone exam.

The templates were used to aggregate data derived from rubrics we devised for specific class assignments for each of these courses. Each rubric assessed the level of mastery exhibited in individual students' assignments with reference to the PAB (and additional) competencies. We adapted the "VALUE Rubric Development Project" of the Association of American Colleges and Universities, <https://www.aacu.org/value/rubrics> for this purpose. *[The rubrics used to assess each assignment are available on request from Laurie Goldman (laurie.goldman@tufts.edu).]*

In several courses, we use also the rubrics to communicate with students about expectations and their progress in developing the competencies. The rubric forms distributed to the students include detailed explanations of each ranking for every dimension of the competencies. In addition to the rating, students receive comments that explain their weaknesses and offer suggestions for improvement.

These assessment instruments will allow us to trace individual students' progress in developing competencies over their time at UEP, especially with respect to critical analysis, research, and written communication.

2. Surveys of Internship Supervisors and Recent Alumni

Following these tables are the templates we used to aggregate internship supervisors' responses to our survey about UEP students' preparedness for professional practice and reported learning outcomes from our survey of alumni two to five years post-graduation.

Assessment of Student Learning Outcomes: (UEP 250) Foundations of Public Policy and Planning, Fall 2016

This assessment draws on four assignments: a literature review about a specific urban, social, or environmental problem and policy/planning solutions to address it; a policy/planning brief that crafts a recommendation for action on the issue for a targeted audience and annotation that explains how they have applied the conceptual frameworks; and an observation and critique of a public meeting. We develop students' understanding of the purpose and meaning of policy and planning and planning theory by encouraging them to examine the relations between applied social science rationality and core values of equity, justice, sustainability, and aesthetics in addition to efficiency, effectiveness, liberty, and security. This inquiry is integrated into several of the rubric components.

PAB Criteria	Explanation of learning assessed	Average Score (Scale 1-4 with 4 as highest)	Mastery Achieved	Proficiency Achieved	Proficiency Partially Achieved	Not Proficient
			% of students in each level of proficiency			
4A1a) Purpose and Meaning of Planning	Literature Review: Explains the significance of the problem and the rationale for intervention.					
	Policy/Planning Brief: Explains why the proposed intervention is likely to achieve intended outcomes, how it is preferable to the status quo and alternatives, and why it is significant to the stakeholders.					
4A1b) Planning Theory	Literature Review: Identifies, analyzes, and assesses claims about the problem and policy/planning solutions in terms of soundness of assumptions, empirical evidence, and attention to values and values trade-offs.					
	Policy/Planning Brief: Draws on empirical evidence and metaphors and symbols to persuasively justify the recommendations, with attention to values that resonate for audience and constituents. Explain how have integrated rational, communicative, collaborative, and advocacy policy/planning theories in shaping the brief.					

4A1c) Planning Law: Legal and Institutional Contexts	Policy/Planning Brief: Analyzes the institutional context of the proposal (e.g., laws, regulations, organizations) and the authority and influence of key actors within and across levels of government and public, private, and nonprofit/civic sectors.					
4A1e) The Future	Literature Review: Analysis of prior scholarship regarding past and projected trends (Also relates to 1a).					
	Policy/Planning Brief: Analyzes the potential for incremental vs. radical change in relation to perceptions of the problem, solutions, and politics. (Also relates to 1b and 1c.)					
4A2a) Research	Literature Review: Effective literature search; identification of gaps in the literature; appropriate referencing.					
4A2b) Written Communication	Literature Review: Organization and flow of the narrative is compelling, clear, and connected; Writing is clear and professional.					
	Policy/Planning Brief: Organization and flow of the narrative is compelling, clear, and connected; Writing is clear and professional and appropriate for the intended audience.					
42d) Plan Creation and Implementation	Policy/Planning Brief: Identifies and explains how the proposal will be implemented and evaluated. (This was an optional element of the assignment.)					
43a) Professional Ethics and Responsibility and 3c) Governance and Participation	Public Meeting Observation and Critique: Description and analysis of public officials' communication with and inclusion of stakeholders with emphasis on integration of expert and local knowledge, and respect for diverse views, cultural competency. <i>(Also assessed in two of the measures explanation of the choice of audience for the Policy/Planning Brief and why it is significant to the constituents; cf. 1a, 1c)</i>					

Assessment of Student Learning Outcomes: (UEP 251) Economics for Policy and Planning Spring 2017 (M.A. only)

This assessment is based on composites of multiple choice, short answer, and essay exam questions on mid-term and final exams.

PAB Criteria & Specific competency	Topics covered within this competency:	Median correct	Mastery Achieved:	Proficiency Achieved:	Proficiency Partially Achieved:	Not Proficient:
			90-100%	80-89%	70-79%	<70%
% of students at each level						
4A3e: Growth and Development (Economic influences on policy and planning)						
Role of markets and market power	Introduction to microeconomic analysis and the neoclassical model, comparisons to alternative concepts of value pluralism; market supply and demand, price elasticity, market equilibrium (short and long run), market shortage and surplus; efficiency vs equity; market concentration, market failure, and market types, including perfect competition, monopolies, and natural monopolies.	Exam 1	Exam 1	Exam 1	Exam 1	Exam 1
		Exam 2	Exam 2	Exam 2	Exam 2	Exam 2
Consumer and producer economic theory	Principles of neoclassical utility theory, indifference curves, budget constraints, and consumer equilibrium; price discrimination; economic measures of social welfare, including consumer and producer surplus and deadweight losses; producer cost, revenue, and profits; producer output and pricing decisions; economies of scale and optimal firm size.					
4A3d: Sustainability and Environmental Quality (Environmental, social, and cultural influences on policy and planning)						
Environmental economics	Externalities, environmental damage, and related market failures; public goods and common property resources; role of government in market failures (provision of public goods, taxation, regulation, property rights enforcement, etc.); non-market valuation strategies; cost-benefit and life cycle analysis, discounting and the discount rate.					
Urban economics	Economic rationale for the existence of cities; scale and agglomeration economies; monocentric and polycentric city models; transportation costs and public transportation.					
4A3c: Governance and Participation (Different roles of government, governance, and citizenship in policy and planning)						
Government taxation and regulation	Effect of taxes on market outcomes (price/quantity) and welfare (consumer/producer surplus); distributional consequences of taxation; price elasticity, tax revenue and tax burden.					
4A3b: Equity, Diversity, Social Justice (UEP competency: Political and economic power mapping)						
Inequality and Gini coefficients	Trends in income inequality and income redistribution efforts; Lorenz curves and Gini coefficients; normative standards of equity; spatial concentrations of poverty and inequality.					

Assessment of Student Learning Outcomes: (UEP 252) Cities in Space, Place and Time, Fall 2016

This assessment draws on students’ analysis of two city plans, one dated prior to 1950 and another dated after 1950 in the same city. The rubrics used for assessing provide feedback on multiple components of each assignment that together convey the students’ level of mastery of the competencies in the following table. Scores for some of these elements were assessed with respect to more than one competency.

PAB Criteria	Explanation of learning assessed	Average Score (Scale 1-4 with 4 as highest)	Mastery Achieved	Proficiency Achieved	Proficiency Partially Achieved	Not Proficient
			% of students in each level of proficiency			
4A1a) Purpose and Meaning of Planning	Explains how the growth of cities and metropolitan areas created new challenges and opportunities in the context of longer-term changes and trends and the roles planners and policymakers assumed to respond to them.	Pre-1950	Pre-1950	Pre-1950	Pre-1950	Pre-1950
		Post-1950	Post-1950	Post-1950	Post-1950	Post-1950
4A1b) Planning Theory	Explains framings (theories or models) underlying proposed solutions, alternatives, and favored approaches and how this framing changed or did not change over time.					
4A1c) Planning Law: Legal and Institutional Contexts	Explores how city, state, and national government roles evolved in response to advocacy and challenges, including evolving roles of organized citizens and interest groups and, and in relation to major legal/statutory landmarks.					
4A1d) Human Settlements and History of Planning and 4A3e) Growth and Development	Examines reasons for the patterns and challenges of urbanization, growth, and decline and policy/planning attempts to foster and manage growth and decline.					
4A1f) Global Dimensions of Planning	Considers global economic trends and industrialization and urbanization; migration; global financial flows of investment and finance; influences of war, climate, and recessions.					
4A1e) The Future	Analyzes the potential influences of the planning document on issues and conditions over time					

	leading to today, including influences on planning/policy practice.										
4A2b) Written Communication	Uses clear and concise language and a compelling narrative structure to persuasively communicate meaning to the intended audience, using appropriate terminology and citations.										
43a) Professional Ethics and Responsibility and 43b) Social Justice 43c) Governance and Participation 43d) Sustainability and Environmental Quality	<p>Reflects thoughtfully on dimensions of the AICP and ASPA professional codes of ethics regarding:</p> <ul style="list-style-type: none"> the long-term consequences of actions, the inter-relatedness of decisions meaningful community communication and participation in decision making social and racial justice with special concern for marginalized communities impacts on and transformations of the physical environment, locally and regionally with respect to energy, food, water issues, or other environmental trends 	Pre-1950	Post-1950								

Assessment of Student Learning Outcomes: (UEP 255) Field Projects: Planning and Practice, Spring 2017

This assessment draws on the written work, oral presentations, self- and team- assessment reports, and faculty observations of individual students and teams. The learning outcomes highlighted are those our alumni have told us are among the most critical to successful practice in their policy and planning careers. The table reports on ratings at the team level for each of the eight teams.

PAB Criterion	Explanation of learning assessed	Mastery Achieved	Proficiency Achieved	Proficiency Partially Achieved	Not Proficient
		# teams/8 teams			
4A2d Plan Creation and Implementation and 4a2e Planning Process Methods					
Collaborative Skills: project management	Plan is developed with realistic scope of work, detailed tasks, timeline, and person responsible.				
	Division of labor among team is equitable and makes best use of member strengths and interests.				
	Team monitors progress regularly and makes timely adjustments.				
	Team completes all deliverables and meets deadlines.				
Collaborative Skills: communication and relationship building	Communication within team is timely, succinct, complete, and clear.				
	Communication between team and partner is timely, succinct, and clear.				
	Team takes time to check in as people with each other and with partner.				
	Team provides appropriate, direct, and honest feedback (both positive and negative) to each other and to partner.				
	Trust and working relationships between team members.				
	Trust and working relationships between team and partner.				
4A2f) Leadership and Management:					
Team problem solving: adapting to the unexpected and obstacles	Team members have deep understanding of each other’s strengths and challenges, including each other’s preferred style in managing unanticipated problems.				
	Team always discusses, identifies, records, and plans for time availability and constraints of individual members.				
	Team members are as flexible with their schedules as possible and assume additional duties as necessary when unanticipated demands arise.				
	All potential solutions for unanticipated problems generated within the group are considered.				

4A3b) Equity, Diversity, and Social Justice:					
Ability to work across difference: understanding and respect for client/partner mission, interests, culture, and sensitivities	Team has deep understanding and respect for client/partner mission, interests, culture, and sensitivities.				
	Team reflects on and develops deep self-awareness of their own culture and positionality.				
	Team asks questions and initiates dialogue to develop deeper understanding.				
	Team acts in ways that are sensitive to the differences in culture and interests among their partner and stakeholders.				
4A2b) Visual Communications – written report	The design and layout (style, colors, font type, illustrative graphics) is highly compelling and appropriate, and greatly enhances readability and comprehension.				
	Structure and flow is very logical and of appropriate length.				
4A2b) Visual Communications – oral presentation	Visuals (maps, images, charts, etc.) are highly legible, of high quality, and greatly enhance understanding.				
	The design and layout (style, colors, font type, illustrative graphics) is highly compelling and appropriate, and greatly enhances readability and comprehension.				
	Structure and flow is very logical and of appropriate length.				
4A2b) Oral Communication – presentation	Visuals (maps, images, charts, etc.) are highly legible, of high quality, and greatly enhance understanding.				
	The project was presented at a good pace (not rushed), had smooth transitions, and ended on time.				
	Each presenter spoke clearly and loudly enough to be heard by all.				
	The language was accessible and illuminating to the lay public (acronyms were spelled out and jargon avoided).				
	Presenters were well-prepared, did not read from notes, or look at the slides while talking.				
4A2b) Oral Communication – presentation	Presenters maintained strong eye contact with the audience and were engaging (voice, tone, mood, humor, and level of energy).				
	There was significant cohesion between the verbal and visual messages.				

Assessment of Student Learning Outcomes: (UEP 255) Thesis and Capstone Exams

This table reports the assessment of students’ learning proficiency as demonstrated in their thesis projects or capstone exams. The students’ advisors submit this assessment following the students’ integration of feedback from both the advisor and reader/s provided in the thesis or exam defense. The assessment emphasizes students’ research and writing skills, especially their ability to synthesize a variety of sources of knowledge, their critical analysis skills, and their use of quantitative and/or qualitative analysis techniques. They use these skills in developing their substantive policy and planning knowledge (Competencies in the 41A category). Virtually all projects devote extensive attention to concerns of equity, diversity, justice, and sustainability. The 40 thesis projects and exams included in the table were submitted in the 2016/2017 academic year.

PAB Criterion	Explanation of learning assessed	Mastery Achieved	Proficiency Achieved	Proficiency Partially Achieved	Not Proficient
4A1 General Planning Knowledge; 4A2a Research	Synthesizes in-depth information from relevant sources that represent and explain various points of view/approaches.				
4A1 General Planning Knowledge 4A3b Equity, Diversity, Justice 4A3 Growth and Development	Thoroughly and systematically analyzes own and others' assumptions and carefully evaluates the relevance and effects of relevant social/cultural, political, economic, institutional, historical, and physical contextual factors. Nuanced discussion of the implications of omissions and biases.				
4A1 Existing Knowledge 4A2A Research Conclusions, Limitations, and Implications for Policy, Planning, and Practice	Conclusions are logically tied to the evidence and are discussed insightfully in relation to prior research or discourse in the field. Limitations are identified as the basis for future investigation. Raises relevant and useful implications for the policy/planning field that are clearly derived from findings.				
4A2A Research *	All elements of the theoretical framework and the methodology are skillfully developed and explained, taking into account concerns of reliability, validity, cultural sensitivity, and other biases.				
	Appropriately detailed information is taken/collected from multiple and varied sources. Viewpoints and assumptions of experts/research subjects are questioned thoroughly.				

4A2c Data Analysis Skills*	Proficiently employs <i>advanced</i> quantitative and/or qualitative techniques to effectively describe, test, and or elaborate findings, while considering challenges of reliability, validity, and cultural and other biases.				
	Organizes and synthesizes evidence to reveal important patterns, differences, or similarities related to focus.				
43A2b) Written Communication	Creates a compelling, clear, and connected narrative structure, using headings as appropriate, including an introduction and conclusion. The reader finds it easy to follow.				
	Uses clear and concise language to persuasively communicate meaning to the intended audience with appropriate terminology. There are few spelling or typographical errors. Citations are complete and formatted in a consistent standard style.				

* Projects or exams that do not have an empirical component have been excluded from these numbers.

Internship Supervisors' Assessment of Professional Preparedness: Our survey of Internship Supervisors provides prospective employers' perspectives on UEP student's preparedness for professional positions in the field. The following table includes the competencies and ranking scheme that comprise the assessment.

Internship Supervisors' Assessment of UEP Students' Preparedness for Professional Practice

	Clearly ready for professional practice	Ready but could use more practice	Not ready yet, but improving	Not ready for professional practice	Total
Manage project tasks					
Work independently and meet deadlines					
Collaborate with peers					
Work effectively with supervisor(s)					
Work effectively in public processes					
Work with people from diverse cultural backgrounds					
Collect and organize data and/or information					
Perform quantitative analysis					
Perform qualitative analysis					
Create high quality maps					
Perform spatial analysis					
Evaluate plans, policies or programs					
Make effective oral presentations					
Make effective visual presentations					
Communicate effectively in writing					

Alumni's Satisfaction with How UEP Prepared Them for Careers in Policy and Planning

Our survey of alumni 2-5 years post-graduation, conducted in May of 2016 (with a response rate of 67%), asked for self-assessments of how UEP prepared them for careers in policy and planning. The table below indicates the competencies included in the survey.

	Satisfied	Neutral	Dissatisfied
Understanding the kinds of social, environmental, and urban problems I seek to address			
Learning about the kinds of policy and planning solutions I seek to advance			
Making meaningful contributions to social or environmental justice efforts			
Acquiring skills to become a more effective practitioner.			
Clarifying my career/professional goals			
Securing a new position or advancing my position in a job held previously			
Developing professional networks			