20 A most peculiar success

Constructing UADPhilEcon, a doctoral program in economics at the University of Athens¹

Yanis Varoufakis

A pluralist agenda for postgraduate economics

[The] Azande see as well as we that the failure of their oracle to prophesy truly calls for explanation, but so entangled are they in mystical notions that they must make use of them to account for failure. The contradiction between experience and one mystical notion is explained by reference to other mystical notions.

(Evans-Pritchard 1937: 388)

Mainstream economics is little different. Its success, like that of the Azande's priesthood, is due to its capacity to offer full (and fully mystical) explanations of its explanatory failures and, additionally, to maintain its position of monopoly on "economic witchcraft" by ensuring that only *its* disciples are listened to. To gain that accolade, the young must, courtesy of a suitably rigorous postgraduate education, first suppress their critical faculties and, subsequently, learn how to account for the mainstream theory's failures by appealing to the same mystical notions which failed in the first place.²

Pluralism is the best antidote for the mystification that has become functional to our profession. The primary aim of a pluralist education in economics ought to be simple: *Demystification!* It holds the greatest hope for emancipating the minds and souls of the young from the rituals of "scientific" superstition that are the staple diet of mainstream graduate programs in economics. It also promises to help economics (even mainstream economics!) overcome the deep crisis it has landed in as a result of two developments: (1) the exodus of market-oriented students to assorted business studies, and (2) the flight of the more intellectually inclined students to the rest of the humanities.

A humanist higher education in economics must strive for demystification in two ways: First, by shining the light of open-minded debate on the axiomatic foundations, and limitations, of mainstream economic theory. Students must be able to read the most obtuse and mystical models that the mainstream can throw at them. They must understand their language perfectly, without however becoming hostage to the mythological tales narrated in that language. Second, students must be allowed to acquire intimate knowledge of multiple competing



5

modes of economic reasoning. Such an Archimedean perspective is essential for the defeat of the systematic ignorance that today takes the form of a mathematical religion, complete with its sacred texts, apocryphal notions, and rigid priesthoods.

Mainstream economics must be taught at its highest level

A natural reaction to the state of contemporary economics is to wish for a syllabus which aims to shield students from the arid rituals of the current orthodoxy and, instead, help them approach the economic world as a system that has evolved historically. Would it not be delightful to design a program that sidesteps the countless hours of repetitive mathematical modeling whose end result is negative value added to our understanding of capitalism? Would it not send most of us into a frenzy of joy to be able to dismiss most of the orthodox curriculum, and its sad fixation with rational expectations that no rational person would ever entertain, competitive markets in which no competition ever occurs, models of development in which nothing of substance ever develops, theories of trade in which systemic trade deficits are assumed never to exist, econometric exercises which can never really distinguish between the competing theories, and so on? Of course it would.

And yet, doing that would be an appallingly bad idea. During the late 1980s and the 1990s I taught at an undergraduate program that did precisely that. The Political Economy Program at the University of Sydney was offered to students who wanted to understand contemporary capitalism but who did not want to go through the tortuous path designed for them by the mainstream Economics Department, before ending up with even less of a feel for capitalist dynamics than they had entered university with. Thus, an interesting experiment, lasting almost three decades, occurred with two economics degrees being offered at the same time and in the same faculty.

The intellectual superiority of the Political Economy degree over its mainstream economics counterpart was clear.3 Students acquired a broad social science education, were introduced to all the important schools of thought (albeit somewhat epidermically), and delved in issues ranging from industrial relations and environmental economics to globalization and Far Eastern economic development. In short, the *Political Economy* graduates understood the world as well as one could after dedicating three to four years of one's life to a university education.

In sharp contrast, my standard economics students were confined to the usual unsavory diet of micro, macro, mathematics, econometrics, and the inevitable array of applications of the equi-marginal principle to anything and everything that moves (in a static, of course, way!). At the end of their degree, they were blissfully ignorant of the important economic problems afflicting the world they were about to enter. Technically excellent, they combined the philosophical background of a rather primitive computer with the historical understanding of an amnesiac.



And yet, it was the economics students that exuded the confidence which makes or breaks a career. The *Political Economy* students, although highly employable, lacked in confidence that which they possessed in educational and intellectual essence. Deep down, they did not really think of themselves as competent economists. The mere mention of Lagrange multipliers, fixed point theorems, and co-integration tests that their colleagues from across the corridor knew off the top of their heads, cowed them into a form of intellectual submission that was utterly at odds with their actual capacities. Meanwhile, the economics graduates had no qualms in pronouncing simplistic views and policy recommendations regarding issues that they were genuinely innocent of.

Even worse, after graduating, a small number of the *Political Economy* students enrolled in mainstream economics graduate programs and became neoclassical zealots. With the infinite pathos that is typical of the "born again," they espoused the orthodoxy with a ferocity and anti-pluralist fervor that turned them into the greatest enemies of the type of political economy which they had studied as undergraduates. Interestingly, these few cases, as I witnessed them, led to sad and unfulfilled academic careers, full of bitterness and devoid of any real intellectual excitement.

In short, any attempt to build a curriculum which sidesteps the techniques of the mainstream is bound to backfire, for two reasons: First, for practical reasons, economists need to speak the language of the dominant meta-narrative when attempting to undermine it. Mainstream economics is a web of beliefs and a set of language games (of a Wittgensteinian sort) which are used to couch all the arguments that contribute to the reproduction of society as we know it. In this sense, a study of capitalism which is separate from a study of this meta-narrative is both impossible and ineffective. Second, for purely psychological reasons, not understanding the orthodoxy better than the orthodox do exposes young minds to the danger that they will turn to the latter's soothing embrace as born again zealots.

There is another reason too for investing in the mainstream. "The great virtue of mathematical reasoning in economics" Frank Hahn once wrote,

is that by its precise account of assumptions it becomes crystal clear that application to the 'real world' could be at best provisional ... the task we set ourselves after the last war, to deduce all that was required from a number of axioms, has almost been completed, and while not worthless has only made a small contribution to our understanding.4

An effective pluralist curriculum must therefore subject students to the highest forms of mainstream economics while simultaneously preventing the latter from taking over the spirit and direction of the curriculum. Such a combination of a neoclassical education and a pluralist disposition is becoming increasingly rare these days in the "first" world. Below I relate the experience of putting together such a program in the relative backwardness of the University of Athens, deducing from it that the "periphery" may prove a fertile breeding ground for pluralist economics.



The making of UADPhilEcon: from the Greek Civil War to a pluralist doctoral program

The last sentence requires justification. Why is the periphery a good breeding ground for a pluralist doctoral program such as UADPhilEcon? My answer, drawn from the particular experience with UADPhilEcon, comes in two parts: (1) That a pluralist doctoral program such as UADPhilEcon could only have sprung out of a nineteenth-century university in the European periphery, and (2) that a traumatic recent history, which included a Civil War in which the Left was defeated totally, also played a decisive role.

The University of Athens, the oldest in the land, was founded concurrently with the modern Greek state and as part of the same nation-building exercise that followed Independence from the Ottoman Empire in the 1830s. This background helps generate a healthy student demand for UADPhilEcon places, but also a genuine willingness from academics belonging to other universities to contribute to our courses for a minimal fee. As for the University itself, it harbored sufficient ambition, under the weight of its own history, to look kindly at the prospect of an ambitious doctoral program. The fact that Greece's universities are still unaffected by the strictures of commercialization helped us sidestep the usual pressures (that manifest in newer institutions) to orient any new postgraduate program toward the amorphous market and its precise whims.

In short, innovative doctoral programs, like UADPhilEcon, could be built *tabula rasa* only at a traditional, well established, university that had not caught up with the times. Sometimes, especially in lean and uncertain times, and after society has lost much of the confidence it once had regarding its value system, a university that is "stuck" in the nineteenth century is a university far ahead of its times (without, naturally, either knowing it or wishing it)! Unlike in the United States, the United Kingdom, and other academically developed places, where a progressive doctoral program can be built only after the costly business of undoing some pre-existing program (together with its conventions, norms, and prejudices) is completed, the creation of UAPhilEcon was unimpeded by such burdens.⁵ Putting together such a radically critical and overtly ambitious doctoral program in the stead of an existing mainstream one would require an institutional war that no pluralist either possesses the energy or the power to survive.

Turning now to the surprising claim that UADPhilEcon's existence owes much to the turbulent political history of Greece, it is useful to recall that contemporary Greece was shaped by a civil war that lasted, in its many guises, almost 40 years. It, effectively, started in the 1930s (with the establishment of a fascist regime in 1936),⁶ continued unabated during the years of World War II and the Axis Occupation, took the form of armed conflict during the 1944–1949 period between the Left and the Anglo-American supported conservative forces, metamorphosed as a parliamentary dictatorship of the latter during the 1949–1963 era, showed signs of retreating between 1963 and 1965, only to return in its most tragicomic, but also brutal, form during the Colonels' dictatorship (1967–1974).



282 Y. Varoufakis

To put it bluntly, Greece's academics, including those who were born and/or raised abroad, grew up in a mental environment that precluded political disengagement. The Left and the Right produced intellectual output not just as a means to itself but, also, as ammunition to be utilized in the context of this gigantic clash. Musicians, poets, and academics "belonged," or were thought to belong, to one of the two sides. However, there was no symmetry between the two.

The Right controlled the State fully and utterly. To have had a play admitted onto one of the stages of the National Theatre one had to go through processes that any student of either Franco's or Stasi's practices should be intimately familiar with. None of this, of course, means that the Right's intellectuals lacked quality, integrity, or substance: only that they operated within a system that excluded forcefully their left-wing counterparts. The Left, on the other hand, labored under the long shadow of their 1949 military defeat and the subsequent purges (including executions, lengthy imprisonment, social and institutional exclusion). Stripped of all positions of power, leftists were free to invest in Gramscian intellectual projects which, by the beginning of the 1960s, brought the Left to a position of cultural hegemony.

The 1967–1974 dictatorship, in an ironic manner, strengthened further this hegemony, especially in view of the student uprising of 1973, a "delayed Greek May 1968," and ensured that the 1970s and 1980s, the renaissance years that followed the collapse of the post-civil war state, were dominated, in terms of discourse, by the defeated Left. As from the late 1970s, and especially the early 1980s (following the electoral victory of the Socialist party), leftist or left-leaning intellectuals began to enter the universities. Many formerly exiled professors, mostly of a left-wing disposition, were recalled from European and American universities.

Thus, the current generation of Greek academic economists grew up in a relatively peculiar intellectual and political milieu. Unlike in the United States, Canada, and in northern Europe, even right-wing economists matured in an environment that encouraged a serious engagement with the emancipatory ideas of a Left which, in contrast to eastern Europe, preserved its high moral ground as a result of having lost all coercive power in 1949 (when it became the victim of state oppression). A number of left-wing, highly intellectual students went abroad to study mathematical economics in the belief that they were following Voltaire's advice; namely, to understand the scriptures better than the priesthood who provided the irrational (and thus despised) Establishment with the necessary legitimacy.

Most of them eventually (by the 1990s) lost their leftist fervor but retained, at the very least, a deep-seeded sympathy for a critical approach to mainstream economics. As for their right-wing colleagues, they too retain an awareness that there is something philosophically controversial, historically inconvenient, and intellectually dishonest hiding behind the mainstream's equations. Greece being the European corner where the Cold War erupted, back in 1944, and ended so terribly late (in the mid-1970s), was a natural locus of an economics which still resonates with the Cold War's echoes.



Of course the Cold War played a crucial role in shaping economics worldwide. We tend to forget that in the 1920s and 1930s, the great questions torturing the mind of the great economists were: Can efficiency be achieved without some form of Central Planning? Can capitalism survive its endogenously generated crises? These questions could only be asked within a pluralist intellectual framework. Hayek strived to disprove Lange and Keynes had no shortage of neoclassical detractors. Economic theory was a battleground on which opposing armies of ideas clashed mercilessly on the basis of their arguments' strengths, rather than on the capacity of one side to pretend that the other simply did not exist.

The Cold War that followed World War II put paid to the intellectual honesty of the interwar period, eventually ending these debates forever, and not only

The Cold War that followed World War II put paid to the intellectual honesty of the interwar period, eventually ending these debates forever, and not only through the efforts of the Rand Corporation and the like. Once the Vietnam War (and the renewed interest in radical social theory) was over, in 1975, and stagflation led to the long march to oblivion of the post-war western social democratic experiment in the corridors of power, it was only a matter of time before a combination of rational expectations macroeconomics, game theory, and new political economy (i.e., politics as pure non-market exchanges) would render economics a politics-free (and thus highly conservative) discipline. The momentous events of the 1989–1991 period sealed things well and truly.

In Greece, by contrast, the Cold War, rather than putting on ice the great debates, rekindled them. Our political upheavals ended much later than their European or American equivalent (some would argue as late as in the 1980s). Our Cold War, it must be remembered, was not particularly cold, as it took the form of an initially red hot Civil War, followed by a period of political oppression that kept the ashes of conflict glowing for much longer, causing young academics to take a heated interest in the political economy behind economics, even while studying Arrow and Debreu's pristine theorems at some Anglo-Celtic or German university.

It is for these two reasons (first, the combination of tradition and relative backwardness typifying the University of Athens, and, second, because of an historically engendered shared appreciation of the political, philosophical, and socially contingent aspects of economics) that a doctoral program such as UAD-PhilEcon could get off the ground on the back of hard, mostly unpaid work put into its creation by enthusiastic colleagues with good mainstream credentials from some of the top universities in the United States, United Kingdom, France, and Germany; colleagues who felt the need to participate in a pluralist program such as the one described in the next section.

That willingness, to conclude, was not merely a type of accidental voluntarism. It was, I submit, the product of the turbulent history of a small country ravaged by Civil War and caught up in the wake of a broader global power struggle, the Cold War, which had profound effects on almost every family, every village, and every cell of its extensive Diaspora. Economic theory, in this context, was not an end in itself but an attempt to study analytically the causes of all that had befallen us.

UADPhilEcon: its philosophy and structure

Philosophy

For the reasons stated in the previous section, UADPhilEcon teaches the highest form of neoclassical economics most rigorously to all its incoming students; regardless, that is, of their individual preferences or plans. But, at the same time, it forces upon them a critical disposition which is at odds with the mainstream's practices. For instance, modules in political philosophy, economic history, and history of economic thought are compulsory.

Of course all good economics departments in the United States and the United Kingdom offer courses in the latter (especially economic history, law and economics, and to a lesser extent, philosophy). However, they do so in the same manner that military schools teach cadets good table manners, or that companies organize golfing weekends for their executives: they are treated as, at best, essential add-ons to the real business they are engaged in; either as a vital induction in etiquette or as pastimes which help rejuvenate the mind while the latter is taking a break.

In contrast, UADPhilEcon teaches history, political philosophy, and the history of ideas as an integral part of economic theory's central core: neoclassical, classical, Austrian, Ricardian, Marxist, and Keynesian, among others. The simple idea here is that economics is infected to the core with philosophically exciting concepts and historically contingent hypotheses that no one can properly understand in the absence of such a philosophical-cum-historical approach. In short, UADPhilEcon espoused early the following two mottos:

[We] ... should wish to see a world in which education aimed at mental freedom rather than at imprisoning the minds of the young in a rigid armor of dogma calculated to protect them through life against the shafts of impartial evidence. The world needs open hearts and open minds, and it is not through rigid systems, whether old or new, that these can be derived.

(Russell 1957: vii)

The study of economics does not seem to require any specialized gifts of an unusually high order. Is it not, intellectually regarded, a very easy subject compared with the higher branches of philosophy and pure science? Yet good, or even competent, economists are the rarest of birds. An easy subject at which very few excel! The paradox finds its explanation perhaps, in that the master-economist must possess a rare combination of gifts. He must reach a high standard in several different directions and must combine talents not often found together. He must be mathematician, historian, statesman, philosopher – in some degree. He must understand symbols and speak in words. He must contemplate the particular in terms of the general, and touch abstract and concrete in the same flight of thought. He must study the present in the light of the past for the purposes of the future. No part of



man's nature or his institutions must lie entirely outside his regard. He must be purposeful and disinterested in a simultaneous mood; as aloof and incorruptible as an artist.

(Keynes 1924: 321–322)

However, this is not the whole story. Although UADPhilEcon is pluralist from its inception, this choice is not only due to our normative beliefs. It is also a choice made on the basis of some clear evidence that *all* economics, including the mainstream, is in deep trouble – and that the pluralist avenue is the only one that has a chance of steering economics away from academic extinction.

Indeed, mainstream economics' troubles have the same causes as its fabulous success. The latter was built (since the 1870s) on the claim that it had expunged politics, philosophy, sociology, psychology, and history from its scientific theory of society. This was, indeed, a clever political strategy, as it helped the mainstream not only rid itself of the eccentrics, the radicals, and the downright inconvenient thinkers, but also helped it gain a great deal of influence both within universities (as perhaps the sole "respectable" social science) and the epicenters of real power (government and the corporations).

However, once it succeeded, what was left was a colorless and complicated economic theory, foundationally disconnected from economic reality, which could neither address the big issues (e.g., poverty or the choice of ecological strategy that is in the public interest) nor stir the passions amongst the young. Thus, over the past decade, passionate young intellectuals are voting with their feet, turning their back on economics degrees and heading for the rest of the humanities. As for the bulk of the student body, who try (in George Bernard Shaw's ironic words) are reasonable enough to aspire only to adapting themselves to our world (as opposed to doing the opposite), they are being lured away from economics by more "practical" competitors (e.g., marketing), with greater market value (and fewer demands on one's brain). Thus, economics departments are beginning to resemble magnificent cathedrals with a dwindling flock.

The only antidote to both the mainstream's intellectual totalitarianism and its unfolding decline is to delve into time-honored economic, political, and philosophical debates – to give the emotions another stir; to turn the spotlight on the politics and philosophy that lurk in the shadows of every neoclassical model, every cointegration, and every game-theoretic narrative. To this end, UADPhilEcon imposes the rest of the social sciences, history, and philosophy on its first-year students: first, to help them understand economics deeply, something that is otherwise impossible, and, second, to help save even neoclassicism from its own folly.

Course structure

To put the above philosophy into practice, UADPhilEcon's stated objectives of (1) a solid education in mainstream economics at the highest theoretical and applied levels, and (2) a critical approach to mainstream economics which investigates carefully the historical, philosophical, and political foundations (as

well as prejudices) of every major theory or model are served by the following two strategies: (1) an ongoing dialogue between economics and the rest of the humanities, between mainstream and non-mainstream economic theories, built into the courses from the very first to the very last lecture or seminar; and (2) an emphasis on the discipline's original sources (as opposed to textbook versions of them). For instance, we expect our MPhil graduates to have read, from the original, at least some of the classic texts by Smith, Ricardo, Marx, Keynes, Arrow, Debreu, Friedman, Hayek, and Sweezy.

The above are reflected in the curriculum in three ways. First, incoming students are exposed to a compulsory year-long course entitled *Economics as a* Social Science (Soc10). This course consists of three components: Political Philosophy, Economic History, and History of Economic Thought. It is taught in tandem with advanced microeconomics and advanced macroeconomics and engages the latter in a constant dialogue (e.g., on the nexus between Hobbes, Hume, Bentham, and utility theory). Second, in their second year, students choose at least one course per semester based on the systematic reading of classic texts (e.g., a semester-long reading course on General Equilibrium, Game Theory and Social Choice, or Financial Economics, or Economic Philosophy, or Keynes's General Theory, or Marx's Capital). Third, among the optional courses in the second year of coursework, students are offered the choice among courses in applied economics but also options with a social science orientation (e.g. History, Anthropology, or Political Economy).

In more detail, in their first year, students take four year-long compulsory courses (and no optional courses): Advanced Microeconomics, Advanced Macroeconomics, Quantitative Methods (consisting of mathematical analysis, an emphasis of topology, statistics, and econometrics), and Economics as a Social Science (which comprises three segments: political philosophy, economic history, and history of economic thought) (see Appendix). Importantly, all firstyear courses, whilst subject to monthly assessment, are examined at one sitting at the end of the academic year (i.e., they are not divided into semesters). Thus, our students must revise *simultaneously* on diverse fields ranging from topology to Locke's and Hegel's philosophies and from Hicksian or Marxist growth theory to general equilibrium and game theory.

In the second year, and besides the standard Research Methods course which is compulsory to all, laissez-faire replaces the rigidity of the first year. Students choose freely from the following diverse menu of courses:

A General – Economic Theory

EcT201 – Seminal Texts on Philosophy and Economics

EcT202 – Seminal Texts on General Equilibrium, Game Theory, and Social Choice

EcT203 – Reading Keynes's General Theory and the Keynesians

EcT204 – Seminal Texts on the Theory of Growth

EcT205 – International Macroeconomics and Public Finance



9	
0	
1	
2	
2	

EcT206 – Marx's Economic The	eory I
------------------------------	--------

EcT207 - Marx's Economic Theory II

EcT208 – Comparative Economic Systems

EcT209 – Technology, Growth, and Economic Change

EcT210 – Development Economics and Industrial Dynamics

EcT211 – The Theory of the Firm

EcT212 – Structural Policies and the Management of Change

EcT213 – International Trade

EcT214 - Post Keynesian Economics

EcT215 – The Political Economy of Globalizing Capital

EcT216 – Feminist Economics

B Finance

EcF201 – Seminal Texts on Financial Economics

EcF202 – Banking and Firm Finance

EcF203 – Financial Analysis

EcF204 – Mathematical Models of Derivative Pricing

C Applied Economics

EcA201 – Public Finance

EcA202 - Industrial Organization

EcA203 – Labor Economics

EcA204 – Environmental Economics

D Economic History

EcH201 – History of Firms and Entrepreneurship

EcH202 - Greek Economic History I (nineteenth century to the interwar vears)

EcH203 – Greek Economic History II (interwar to date)

EcH204 – History of Economic Development

E Quantitative Methods

Q201 – Seminal Texts on the Theory of Statistics and Probability

Q202 – Mathematical Programming

Q203 – Control and Economics

Q204 – Topics in Econometrics

Q205 – Statistical Computing

Q206 – Topology

Conclusion

Why call UADPhilEcon a success? Some statistics follow in lieu of an answer: the batch of around 15 students who graduate each year with a Master of Philosophy

288 Y. Varoufakis

in Economics (MPhilEcon), after two years of intensive coursework, typically have sat through 576 hours of lectures and seminars, and have been taught by 37 professors of whom seven come from abroad (the United States, United Kingdom, Germany, Belgium, Australia, or elsewhere) exclusively for the purposes of teaching at UADPhilEcon. Meanwhile, they have been exposed to around 52 diverse research seminars, taking in subjects from anthropology and philosophy to macrodynamics, game theory, and mathematical finance. Of those 52 seminar presenters, 22 are foreign academics. Finally, our students have already started publishing internationally both in the mainstream and in the heterodox journals.

One more datum that places the above into perspective: *UADPhilEcon charges not one dollar of fees to* any *of its students* (Greek or foreign). Pluralism not only works but is also produced and re-produced as a purely public good. No fees are charged and only a few external teachers get some paltry sums to cover for their per diem expenses while in Athens. Additionally, the program's administrators offer their labor for free. It is in this sense that, perhaps, the noun "success" in my title is not an inappropriate choice.

Why "most peculiar"? Because, as I wrote in the introduction, it was achieved almost accidentally at a university which would not have come readily to mind if a few years ago one had been asked to predict the place where a pluralist, and at the same time well organized and utterly rigorous, doctoral program in economics would emerge.

Our greatest source of hope for the future is our most peculiar student body. They make a conscious choice to forego a highly paying private sector career for the uncertain pleasures of a genuine intellectual engagement with economics. As for our greatest fear, it is that market norms will infect Greek society's attitude to education to the extent that they will extinguish the historically induced ethos which has hitherto motivated both our staff and students to think of education as a non-commodity of great value.

Does it matter whether a program like UADPhilEcon survives? Iris Murdoch once wrote that "it is the punishment of a false God to become unreal." This seems to be the unfolding fate of mainstream economics. Yes, it succeeded in becoming a cross between a religion with equations and the Queen of the Social Sciences. However, it ended up holding a poisoned scepter. With its success founded not on the truth status of its results but, instead, on the late twentieth-century historical and political triumph of the ideology of the market, its students are now abandoning it and its dominance is becoming increasingly irrelevant. Ironically, therefore, pluralist programs like UADPhilEcon may offer mainstream economics a lifeline whose necessity its practitioners are too unsophisticated to recognize.



4 5 6 7 8 9 () 1 2 3 4 5 6 7 8 9 () 1 2 3

4 5

Appendix: the structure of first-year UADPhilEcon courses

Advanced microeconomic theory Ec10

Ec101 – Advanced microeconomic theory I (semester 1)

- *Module 1 Parametric Choice*: The rational choice model, expected utility theory and its discontents
- Module 2 Strategic Choice: Theory of strategic choice, game theory (non-cooperative, static, dynamic, evolutionary games), models of imperfect competition
- *Module 3 Social Choice*: Aggregation of preferences, social welfare functions, compensation principles, impossibility theorems

Ec102 – Advanced microeconomic theory II (semester 2)

- Module 4 Production Technologies: Production functions, cost, technologies, duality, optimization under price taking, degrees of strategic competition
- *Module 5 General Equilibrium Theory:* Brouwer's fixed point theorem, the 1st and 2nd fundamental theorems, the theorems of Arrow-Debreu
- Module 6 Market Failures, Market Power, and Regulation: Contracts, incentives, bargaining, externalities, mechanism design

Advanced macroeconomic theory Ec11

Ec111 – Advanced macroeconomic theory I (semester 1)

- Module 1 Open Economy Macroeconomics and the Economics of the European Monetary Union: Monetary and fiscal policy in Hicks's neoclassical synthesis, money and inflation, interpretations of competing, interpretations of Keynes's effective demand, the Mundell-Fleming model and extensions, Euro-zone economics and lessons from Greece's entry into EMU
- Module 2 Business Cycles, Nominal Rigidities, and Macroeconomic Policy: Flexible-price models with rational expectations, new-Keynesian economics, monopolistic competition, staggered wage and price setting, introduction to dynamic stochastic general equilibrium models with nominal rigidities, policy analysis in a new-Keynesian framework, monetary policy rules, optimal policy design
- *Module 3 Growth and Cycles:* Classical-Marxian reproduction, growth and cycles, neoclassical growth theory, new versus old growth theories



Ec112 – Advanced macroeconomic theory II (semester 2)

- Module 4 Long Run Equilibrium in Goods, Money and Stocks: Recursive macroeconomic theory, the equity premium puzzle, the behavior of stock prices, overlapping generation models
- Module 5 Aggregate Savings: Expected and non-expected utility theories
 of savings, liquidity constraints, general equilibrium with incomplete
 markets, portfolio choice
- *Module 6 Money and Capital Pricing:* Money and interest, capital asset pricing models, inter-temporal asset pricing contracts

Quantitative methods 010

0101 – Mathematical economics (semester 1)

- Module 1 Differential equations, phase diagrams, Liapunov's theorem
- Module 2 Optimization: Unconstrained optimization, quadratic programming, Markowitz portfolio, constrained optimization, Karush-Tucker conditions
- *Module 3* Calculus of variations and optimal control: Lagrange-Euler lemma, the Maximum principle
- *Modules 4, 5, & 6* Topology, fixed point theorems, dynamic optimization, difference equations

Q102 – Econometrics (semester 2)

- Module 7 Statistical Inference: Likelihood, ML estimators, testing, power functions, likelihood ratio, Wald's decomposition, Lagrange multiplier tests, confidence intervals, the generalized linear model (random variables, estimators, regression, maximum likelihood), least squares, mis-specification, non-linearities
- Module 8 Identification: Model choice: heteroskedasticity, serial dependence, method of moments, correlation of regressors with errors, instrumental variables estimator, SURE estimators, Kroenecker products, efficient estimation, simultaneous equations
- Module 9 Applied Econometrics: Dynamic models: empirical models as
 derived entities, statistical representation for systems, theory of reduction,
 linking economics and econometrics. Dynamic models of aggregate
 demand, money demand, consumption. Stationarity, integratedness, random
 walks, the distribution of the autoregressive coefficient. Cointegration.
 Empirical illustrations



8 9 () 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 ()

1

2

3

4

5

Economics as a social science Soc10

Soc101 – Political philosophy (first two modules, or eight weeks, of semester 1)

- *Module 1 The Anatomy of Liberalism I:* Introduction to political philosophy. Economics as a branch of the Enlightenment Project. Neoclassicism as an offshoot of Anglo-Celtic philosophy: From Aristotle to Hobbes, Hume, Locke, Bentham, ordinal utilitarianism, and Arrow's impossibility theorem. Then, on to Rawls, Nozick, and Hayek
- Module 2 Liberalism's Discontents: Non-instrumental rationalities, Kant's categorical imperative, dialectical reasoning, feminist critiques: Rousseau, Marx, Carol Pateman. The rational choice model, empiricism, positivism, and the scientific status of economic theories

Soc102 – Economic and social history (last four weeks of semester 1 and first four weeks of semester 2)

- Module 3 The Transition to Capitalism: The fifteenth-eighteenth-century period: Economic, social, and demographic traits of pre-industrial Europe. The rise of commercial capitalism. Pre-industrial and proto-industrial forms of production. Origins of the industrial revolution. The factory system and the growth of the proletariat. The liberal period 1850–1875. Laissez-faire in industry and the great Boom. Economic unification of the world. Social changes (city, industry, working class). Bourgeoisie and agriculture 1750-1875
- Module 4 Late Capitalism: The 1875–1914 period. The great depression of 1875-1890. Protectionism, state regulation, imperialism. The second industrial revolution. Mass production and mass market. The scientific organization of labor (Taylorism-Fordism). The interwar period (1918-1940). The rise of U.S. economic domination. The economic reconstruction of Europe. The 1929 crisis. The 1950–1992 period: Post-war economic order. The decades of crisis 1973–1992: The rise of late globalization. The transition from competitive to oligopolistic capitalism. The rise of conglomerates. The Great Depression. The post-war world economic order.

Soc103 – History of economic thought (last eight weeks of semester 2)

- Module 5 Early and Classical Political Economy: Mercantilism, the Physiocrats, early equilibrium concepts, classical political economy - Smith, Ricardo, and Marx. The marginalist revolution.
- Module 6 Twentieth-Century Debates: Neoclassical value theory, the Keynes versus the (neo)classics controversies, the Cambridge controversies, the rise and fall of the rational expectations revolution, recent trends and debates.



Notes

- 1 UADPhilEcon is an international doctoral program established by the Department of Economics at the University of Athens with a strong commitment to pluralism and to treating economics as a social science (see www.uadphilecon.gr). After two years of planning, UADPhilEcon opened its doors to the first cohort of students in October 2003. Since then approximately 25 students are admitted each October of which, on average, 15 graduate with a Master of Philosophy in Economics (MPhilEcon) at the end of two years of intensive coursework. Subsequently, they write a thesis whose successful defense leads them to the DPhilEcon. UADPhilEcon's students come from different walks of life, diverse educational backgrounds (economists, engineers, historians, mathematicians, and so on), age groups, and nationalities. Already, a series of high caliber research publications has started flowing out of UADPhilEcon students in areas as diverse as political economy, finance, economic philosophy, and game theory.
- 2 For instance, the notion of "natural" unemployment was conjured up in order to explain the failure of the market to engender full employment and of economics to explain that failure. Hundreds, if not thousands, of young, up and coming macroeconomists worked energetically for decades in order to compute the relevant NAIRUs. To no avail, of course.
- 3 My credentials as an impartial assessor, I submit, are rather good: I was appointed by the "real" economists as a game theorist but proved a part time defector, teaching courses in both degrees.
- 4 My work on game theory led me to the same conclusion. There is no better means of exposing the limitations of any attempt to explain society in terms of methodological individualism than a careful analysis of the logical impasses of its highest form: that is, of Game Theory. For an expansion upon this point see the Epilogue to Hargeaves-Heap and Varoufakis (2004).
- 5 There were of course countless other types of impediments; the bureaucracy of the Greek state being the first that comes, painfully, to mind.
- 6 If we wish, we could trace its roots further back, to the clash between the modernizing bourgeois elements of Greek society and an alliance between the landed lords and the Palace. That clash marked the first three decades of the twentieth century, at times taking the form of open warfare.
- 7 I borrow this term from Margaret Anagnostopoulou.

References

Evans-Pritchard, E.E. (1937) *Witchcraft, Oracles and Magic among the Azande*, Oxford: Oxford University Press.

Hargeaves-Heap, S. and Varoufakis, Y. (2004) *Game Theory: A Critical Text*, London: Routledge.

Keynes, J.M. (1924) "Alfred Marshall, 1842–1924," The Economic Journal, 34 (September): 311–372.

Russell, B. (1957) Why I Am Not a Christian, P. Edwards (ed.), London: Allen & Unwin.



4