

SOPP 5299 – ECONOMICS OF HIGHER EDUCATION

Winter 2019

Syllabus

Course instructor: Kata Orosz

COURSE DESCRIPTION..... 2

 Prerequisites 2

 Learning outcomes..... 2

 Assessment 2

 Textbook and required readings..... 4

 Office hours..... 4

 Policy on attendance..... 4

 Responsibilities of the instructor 5

COURSE SCHEDULE 6

ASSIGNMENT GUIDELINES 11

 Guidelines for in-class presentations..... 11

 Guidelines for policy-focused term papers..... 12

 Guidelines for empirical term papers 13

 Guidelines for podcasts (by groups of two)..... 14

COURSE DESCRIPTION

The course will familiarize students with 1) key concepts of economic theory and 2) econometric approaches that are commonly used by policy makers and researchers to conceptualize and study higher education institutions and the students that attend them.

Through a combination of conceptual and empirical readings, group discussions, and two individual assignments, course participants will explore a range of topic areas relevant to higher education policy, including the economic and non-economic benefits of higher education, theories of cost increase in higher education, the relationship between higher education and economic growth, higher education production functions, theories of organizational behavior in higher education, and the role of higher education in national skills training systems. In addition to considering theoretical approaches grounded in human capital theory, the course will also familiarize participants with alternative frameworks (signaling theory, higher education stratification) used for explaining the relationship between higher education and individual and societal outcomes.

Through the critical assessment of higher education research from a range of national contexts, course participants will also learn about the strengths and limitations of various econometric techniques, such as multivariate regression, panel data analysis, instrumental variables, stochastic frontier analysis, and randomized control trials.

Upon successful completion of this course, students will be able to make theoretically grounded and evidence-based arguments in areas of higher education policy such as higher education finance, access and equity policies, and skills training policies.

Prerequisites

Introductory-level familiarity with economics and statistics is an asset but not a requirement for participation in and successful completion of this course.

Learning outcomes

At the end of this course, students will be able to:

- Outline the main economic theories and concepts as they pertain to higher education attainment (from an individual perspective) and higher education provision (from an organizational and public policy perspective);
- Assess the strengths and limitations of econometric research on issues related to higher education;
- Inform policy design and policy evaluation in areas related to higher education by drawing on a combination of economic theories and concepts and a critical assessment of available empirical evidence.

Assessment

To successfully complete the course, students will be required to attend class, read the required readings, participate in in-class discussions, and complete two assignments.

The final course grade will be calculated as follows:

- | | |
|-------------------------|-----|
| - In-class presentation | 30% |
| - Term paper OR podcast | 50% |
| - Class participation | 20% |

In-class presentation: Case study of a higher education system (30% of final course grade)

In Class 9, students are required to give a brief (10-minute) presentation of a higher education system, at their proposal and agreed upon with the instructor in advance. Students must describe the higher education system in a specific country, using the economic theories and concepts covered in the course. Students are required to use PowerPoint / Prezi slides to illustrate their presentation. Presentation slides / links must be submitted through the course's e-learning site; submissions are due on **March 14 by 9:00 am**.

In-class presentations should cover:

- Descriptive statistics of the country's higher education system
- Market structure of higher education
- Participation in higher education
- Revenues of higher education institutions
- Allocation of public funds to higher education
- Unique contextual forces
- Key policy challenges related to higher education

Term paper OR podcast (50% of final course grade)

At the end of the term, students are required to submit a four-page (max. 2000 words) term paper. Students have the choice of writing either a policy-focused term paper, or an empirical term paper.

In a policy-focused the term paper, students must draw on economic theories and concepts to describe a policy issue related to higher education in a specific national / regional context; describe a specific policy or program that has been implemented / proposed to address this issue; and provide a critical synthesis.

In an empirical term paper, students must draw on economic theories and concepts to describe a policy issue related to higher education in a specific national / regional context; provide a critical synthesis of empirical research on the policy issue; and provide new insights bearing on the topic based on the analysis of quantitative data.

As an alternative to the term paper, student groups of two have the option to prepare a 25-minute podcast on a higher education policy issue, in which they interview at least two academics, policy makers or practitioners on the particular issue. The topic of the podcast must be linked to economic theories and concepts discussed in class; provide a critical synthesis of main sources of data and empirical research on the issue; and provide an analysis and synthesis of the interview content, relevant theories and concepts, and empirical research.

Term papers OR podcasts are due on **April 14, 2019**. Late submission will result in the assignment grade being reduced by a grade step (e.g. an A can become an A-) every 24 hours starting from the deadline. Term papers OR podcasts must be submitted through the course's e-learning site. Term papers will be checked for originality with the Turnitin software.

Class participation

(20% of final course grade)

Students are required to attend classes, come to class on time, come to class prepared (i.e., read the required readings prior to the class that they are assigned for), and participate in in-class discussions. Being absent from class, being late for class, coming to class underprepared, and not participating in in-class discussions will lower the class participation grade.

Textbook and required readings

Some of the required readings for this course are from the following textbook:

Toutkoushian, R. K., & Paulsen, M. B. (2016). *Economics of higher education*. New York: Springer.

Students are not required to purchase the textbook. Three copies of the textbook are on reserve in the CEU library for students enrolled in the course. Two copies may be borrowed for an overnight loan; the other copy is available for reading during library hours. The *Course schedule* lists the textbook chapters that are assigned for particular weeks; PDF copies of these chapters are available on the course's e-learning site.

Students will also be required to read additional material in preparation for each class. A list of required readings is available under *Course schedule*, as well as on the course's e-learning site. PDF copies of required readings are posted on the course's e-learning site.

Office hours

The instructor's office hours are on **Tuesdays from 12:30 to 2:30 pm**, in Room O/202. Consultation by appointment is also possible. Students should request appointments for consultation by emailing the instructor at OroszK@ceu.edu at least 24 hours in advance of the requested meeting.

Policy on attendance

Regular class attendance is mandatory and recorded. As a professional school, we expect students to arrive punctually for all classes. Late arrivals are disruptive and faculty have the right to turn late students away from a class. Students must secure the approval of the course instructor in advance if they need to be absent from a class for any reason. If students need to be absent for short periods (up to a few days) during the academic year, they must secure advance approval from their Program Director. In case of absence for medical reasons, students should inform course instructors as well as the Student Affairs Coordinator as soon as possible. A medical opinion (doctor's note) must be submitted to the Student Affairs Coordinator who will keep it on file. Class absence(s) that have not been approved may result in a failing grade for the course.

SPP MPA Student Handbook 2018-2019, p. 32.

Responsibilities of the instructor

- Come to class on time, prepared;
- Create a safe and inspiring learning environment for students;
- Communicate course-related expectations to students clearly and in a timely manner;
- Use consistent and clearly stated evaluation criteria to grade student assignments;
- Submit assignment grades within a week of the assignment deadline;
- Provide reasonably detailed, written feedback to students on their assignments;
- Respond to student emails within 24 hours, with the exception of weekends and holidays;
- Be available for consultation during office hours and during consultation by appointment;
- Be responsive to student feedback.

COURSE SCHEDULE

Class 1: Introduction to the economics of higher education

Date & time: January 10, 2019, 9:00-10:40 am

Location: O/201

The first session of the course will be devoted to introductions and the discussion of course participants' areas of interest in the field of higher education policy. The instructor will describe the learning outcomes, session topics, and course assessment in detail. The introductory session will also provide an overview of the body of theoretical and empirical work typically referred to as "economics of higher education." A discussion of the role of economics and econometrics (or the application of statistical methods to economic data) in higher education policy will conclude the session.

Required reading:

- Toutkoushian, R. K. & Paulsen, M. B. (2016). Chapter 2: *Overview of economic reasoning and terminology*, p. 9-39.

Class 2: Human capital theory

Date & time: January 17, 2019, 9:00-10:40 am

Location: O/201

This session will provide an overview of the main argument and assumptions of human capital theory. We will discuss the two main approaches used in econometric studies to estimate the magnitude of returns to human capital investment: internal rate of return calculations and the Mincerian earnings function. We will also consider the role of economic, political, and cultural context in moderating the relationship between human capital investment and wages.

Required readings:

- Becker, G. (1993). Investment in human capital: Effects on earnings. In: Author, *Human capital: A theoretical and empirical analysis, with special reference to education*. Chicago: University of Chicago Press (3rd edition), p. 29-58.
- Peet, E. D., Fink, G., & Fawzi, W. (2015). Returns to education in developing countries: Evidence from the living standards and measurement study surveys. *Economics of Education Review*, 49, 69-90.

Class 3: Private and social benefits of higher education

Date & time: January 24, 2019, 9:00-10:40 am

Location: O/201

Human capital theory posits that individuals measure the expected costs of attaining higher education against the expected benefits. In this session, we will discuss positive individual and societal outcomes that research links to higher education attainment. We will also consider the extent to which the

empirical evidence that links higher education attainment with private and public benefits supports a causal interpretation, i.e. whether the evidence base allows us to conclude that higher education causes individuals and societies to realize various benefits.

Required readings:

- Toutkoushian, R. K. & Paulsen, M. B. (2016). Chapter 4: *Private and social returns to higher education*, p. 93-142.
- Hooghe, M., Dassonneville, R., & Marien, S. (2015). The impact of education on the development of political trust: Results from a five-year panel study among late adolescents and young adults in Belgium. *Political Studies*, 63(1), 123-141.

Note: There will be no class on January 31. This session will be made up in the second week of March.

Class 4: Higher education and economic growth

Date & time: February 7, 2019, 9:00-10:40 am

Location: O/201

Higher education has been hypothesized to promote economic growth through a variety of channels, including crime reduction, knowledge spillover, and technology diffusion. In this session, we will discuss the conceptual foundations of the relationship between higher education and economic growth and consider empirical evidence on this matter. We will also discuss ways to measure the impact of higher education on local economic development.

Required readings:

- Alvi, S., & Ahmed, A. M. (2014). Analyzing the impact of health and education on total factor productivity: A panel data approach. *Indian Economic Review*, 49(1), 109-123.
- Zhang, Q., Larkin, C., & Lucey, B. M. (2017). The economic impact of higher education institutions in Ireland: Evidence from disaggregated input–output tables. *Studies in Higher Education*, 42(9), 1601-1623.

Note: There will be no class on February 14 due to the SPP reading week. This session will not be made up; students are expected to work on their in-class presentation during this week. The instructor will be available for consultation during this week, in the regular office hours as well as upon request.

Class 5: Private and social costs of higher education

Date & time: February 21, 2019, 9:00-10:40 am

Location: O/201

Human capital theory posits that individuals invest in higher education if the expected benefits of higher education exceed the costs. In this session, we will discuss the types of costs individual incur when attaining higher education and how individuals pay for these costs. We will also discuss the role of

governmental subsidy in higher education provision and will consider the evidence for competing theories of why the cost of higher education provision has been increasing in many countries.

Required readings:

- Toutkoushian, R. K. & Paulsen, M. B. (2016). Chapter 6: *The role of government in higher education*, p. 199-229.
- Bettinger, E. P., Long, B. T., Oreopoulos, P., & Sanbonmatsu, L. (2012). The role of application assistance and information in college decisions: Results from the H&R Block FAFSA experiment. *The Quarterly Journal of Economics*, 127(3), 1205-1242.

Class 6: Higher education production functions

Date & time: February 28, 2019, 9:00-10:40 am

Location: O/201

In this session, we will discuss frameworks that conceptualize higher education institutions as firms that produce outputs via three distinct types of activities: teaching, research, and service. We will discuss the concepts of economies of scale and economies of scope as they pertain to higher education production, and consider empirical evidence on changes in effectiveness and efficiency in higher education production over time.

Required readings:

- Toutkoushian, R. K. & Paulsen, M. B. (2016). Chapter 8: *Competition and production in higher education*, p. 275-322.
- Agasisti, T. (2016). Cost structure, productivity and efficiency of the Italian public higher education industry 2001–2011. *International Review of Applied Economics*, 30(1), 48-68.

Class 7: Theories of organizational behavior in higher education

Date & time: March 7, 2019, 9:00-10:40 am

Location: O/201

In this session, we will discuss the theories of resource dependence, prestige maximization, and academic capitalism. These theories blend insights from microeconomics and organizational theory to explain revenue and expenditure patterns in higher education. We will discuss different ways in which higher education institutions may attempt to increase their revenue and will consider the external forces that may influence how the revenue gets expended.

Required readings:

- Archibald, R. B., & Feldman, D. H. (2008). Explaining increases in higher education costs. *The Journal of Higher Education*, 79(3), 268-295.
- Winston, G. C. (1999). Subsidies, hierarchy and peers: The awkward economics of higher education. *The Journal of Economic Perspectives*, 13(1), 13-36.

Class 8: Sociological perspectives on higher education attainmentDate & time: **March 11, 2019, 3:30-5:10 pm (subject to change)**Location: **TBD**

In this session, we will consider sociological perspectives that expand various assumptions of human capital theory. Moving beyond the role of costs, benefits, and information constraints, we will consider the influence of an array of societal forces on individuals' decision to attain higher education. We will discuss the concept of higher education stratification, positional competition, and the implications of these phenomena for individual and societal outcomes.

Required readings:

- Caner, A., & Okten, C. (2013). Higher education in Turkey: Subsidizing the rich or the poor? *Economics of Education Review*, 35, 75-92.
- Marginson, S. (2016). The worldwide trend to high participation higher education: Dynamics of social stratification in inclusive systems. *Higher Education*, 72(4), 413-434.

Class 9: Case studies of higher education systems

Date & time: March 14, 2019, 9:00-10:40 am

Location: O/201

In this session, students will give brief (10-minute) presentations of a higher education system of their choice, using the economic theories and concepts covered in the course.

Class 10: Behavioral perspectives on higher education attainment; signaling theory

Date & time: March 21, 2019, 9:00-10:40 am

Location: O/201

Guest lecturer: Marc Kaufman, Assistant Professor, CEU Department of Economics and Business

Behavioral economics of education is an expanding field. There are many unsolved questions about education, some of which are difficult to grasp when seen within the neoclassical economic model: Why do so many students drop out of university after spending years there? What returns do students expect from additional education? Are biases -- such as present bias, projection bias, statistical mistakes -- leading students to make systematic mistakes, in particular by underinvesting in education? The aim of this session is to give students a very brief overview of the growing research in this area.

After the guest lecture, we will discuss signaling theory, and compare and contrast the predictions of human capital theory and signaling theory pertaining to the relationship between higher education and earnings. We will discuss the implications of the two theories for public policy.

Required reading:

- Weiss, A. (1995). Human capital vs. signalling explanations of wages. *The Journal of Economic Perspectives*, 9(4), 133-154.

Recommended reading (skim only):

- DellaVigna, S. (2009). Psychology and economics: Evidence from the field. *Journal of Economic Literature*, 47(2), 315-372.

Class 11: Higher education and the national skills training system

Date & time: March 28, 2019, 9:00-10:40 am

Location: O/201

In the final session of the course, we will discuss the concept of skill: a concept that combines insights from human capital theory, labor economics, and sociology. We will discuss the interrelated components of national skill training systems and consider the implications of the structure of skills training systems on individual and societal outcomes. We will compare different measures of skill and consider the empirical evidence on educational and skill undermatch.

Required readings:

- Green, F. (2013). What is skill? In: Author, Skills and skilled work: An economic and social analysis (pp. 8-24). Oxford: Oxford University Press.
- Tomić, I. (2014). Structural unemployment in Croatia: How important is the occupational mismatch? *Economic Research-Ekonomska Istraživanja*, 27(1), 346-365.

ASSIGNMENT GUIDELINES

Guidelines for in-class presentations

Students are required to give a brief (10-minute) but reasonably detailed presentation of a higher education system of their choice. Students must describe the higher education system in a specific country, using the economic theories and concepts covered in the course. Students are required to use PowerPoint / Prezi slides to illustrate their presentation. Presentation slides / links must be submitted through the course's e-learning site; submissions are due by **March 14, 9:00 am**. The presentation grade is worth 30% of the final course grade.

In their presentations, students should draw on publicly available data sources and empirical research (e.g., journal articles, reports by governmental agencies) on the higher education system of their choice. The national statistical agency of the country is usually a good starting point for descriptive statistics on higher education. Regional and global databases, such as World Bank EdStats, the UNESCO Institute for Statistics, or EuroStat may also have relevant and easily accessible information.

In-class presentations should cover as many of the following areas as possible, given availability of information:

- 1. Description of the country's national skills training system, place of higher education institutions in it**
- 2. Description of the country's higher education system**
 - Market structure of higher education
 - Number of higher education institutions
 - Type of higher education institutions (public/private, non-profit/for-profit, teaching/research mission, residential/commuter, etc.)
 - Geographic distribution of higher education institutions
 - Enrollment numbers, participation and completion rates
- 3. Higher education policies**
 - Admissions policies to higher education institutions
 - Allocation of funds to the higher education sector
 - Presence / absence of tuition and fees; average amounts of tuition and fees
 - Types of governmental subsidies to higher education institutions
 - Types of governmental subsidies to students / families
 - Private sources of revenue of higher education institutions
 - Share of public and private funds for teaching/research
 - Policies that facilitate transition from higher education to work
- 4. Higher education outcomes**
 - Employment rates, earnings of higher education degree holders
 - Estimated return to higher education degrees
 - Evidence on societal benefits
 - Extent of occupational mismatch
- 5. Unique contextual forces**
- 6. Key policy challenges related to higher education**

Guidelines for policy-focused term papers

At the end of the term, students are required to submit a four-page (max. 2000 words) term paper. In the term paper, students have the option to focus on a specific higher education policy in a national context of their choice. The higher education policy must be connected to economic theories and concepts covered in class.

Mandatory elements of the policy-focused term paper:

- Context-specific problem statement;
- Conceptual framework (explicitly tied to relevant theories / concepts discussed in class);
- Description of a specific higher education policy (characteristics, implementation, actual / expected outcomes);
- Discussion of relevant data and research on the policy and/or on similar policies in other contexts;
- Discussion of implications of relevant data and research for the specific policy, in the context in which it was / is being implemented.

Policy-focused term papers, just like empirical term papers and podcasts, are due on **April 14, 2019**. Late submission will result in the assignment grade being reduced by a grade step (e.g. an A can become an A-) every 24 hours starting from the deadline. The grade received on the policy-focused term paper will account for 50% of the final course grade.

All concepts, ideas and data sources used in the policy-focused term paper *must be properly attributed*. Policy-focused term papers must be submitted through the course's e-learning site. Term papers will be checked for originality with the Turnitin software.

Policy-focused term papers will be evaluated based upon:

- The extent to which they include each of the elements listed above;
- The extent to which they incorporate relevant theories and concepts covered in class;
- The breadth and relevance of data and research discussed;
- The quality of academic writing (clarity of argumentation; formality of tone; conciseness, proper attention to grammar, spelling and punctuation; proper and consistent use of a citation style.)

Guidelines for empirical term papers

At the end of the term, students are required to submit a four-page (max. 2000 words) term paper. In the term paper, students have the option to report on their own empirical research. The topic of the empirical research must be related to economic theories and concepts covered in class.

Mandatory elements of the empirical term paper:

- Problem statement
- Definitions of key concepts / conceptual framework
- Brief, focused summary of relevant research
- Research hypotheses
- Description of data used in the research; descriptive statistics of the analytic sample (including information on missingness)
- Model specification
- Regression output
- Interpretation of regression results
- Discussion of study findings and their limitations

Empirical term papers, just like policy-focused term papers and podcasts, are due on **April 14, 2019**. Late submission will result in the assignment grade being reduced by a grade step (e.g. an A can become an A-) every 24 hours starting from the deadline. The grade received on the empirical term paper will account for 50% of the final course grade.

All concepts, ideas and data sources used in the empirical term paper *must be properly attributed*. Empirical term papers must be submitted through the course's e-learning site. Term papers will be checked for originality with the Turnitin software.

Empirical term papers will be evaluated based upon:

- The extent to which they include each of the elements listed above;
- The extent to which they incorporate relevant theories and concepts covered in class;
- The quality of academic writing (clarity of argumentation; formality of tone; conciseness, proper attention to grammar, spelling and punctuation; proper and consistent use of a citation style.)

Guidelines for podcasts (by groups of two)

At the end of the term, students have the option to submit a podcast instead of a policy-focused term paper or an empirical term paper.

Students choosing this option should prepare an approx. 25-minute long audio podcast in which they interview two higher education experts / scholars / practitioners about their thoughts on a well-defined policy issue in the area of higher education. The policy issue must be related to economic theories or concepts covered in class.

Mandatory elements of the podcast:

- Introduction and context: approx. 500-800 words of scripted narration that introduces the policy issue and the concept(s) you are addressing (2-3 minutes)
- Two edited interviews (approx. 8 minutes each, after editing)
- Analysis and synthesis of ideas gained from the interviews and other sources, scripted argumentation (6-8 minutes)
- Full reference list, including all the sources used regardless of medium (academic and non-academic papers, news articles, audio / video documentaries, etc.)

Podcasts, just like policy-focused term papers and empirical term papers, are due on **April 14, 2019**. Late submission will result in the assignment grade being reduced by a grade step (e.g. an A can become an A-) every 24 hours starting from the deadline. The grade received on the podcast will account for 50% of the final course grade. Both members of the group will receive the same grade.

All concepts, ideas and data sources used in the podcast *must be properly attributed*. Podcasts and reference lists must be submitted through the course's e-learning site.

Podcasts will be evaluated based upon:

- The extent to which they include each of the elements listed above;
- The extent to which they incorporate relevant theories and concepts covered in class;
- The quality of the scripted narration and argumentation (clarity of argumentation; conciseness; breadth and relevance of sources);
- The quality of the podcast production (audibility, editing, ambience).