How To Apply - PhD School Economics

To apply to Ph.D. program you must:

1. Follow the instructions contained in the Bando (in Italian) or of the announcement (in English) at the website. In general, the call is published around the end of June of every year.

For updates on this, please check the webpage:

http://www.uniroma1.it/didattica/offerta-formativa/dottorati

Important documents to prepare

- CV
- Publications (if any)
- Letters of reference (optional)
- Project proposal (about 2 pages)

The list of the applicants admitted to the interview will be posted after September **15th, 2020.**

At the moment, due to the health emergency problems, it is very likely that interviews will be on line

For further information please refer to: phdschooleconomics@uniroma1.it

SELECTION PROCEDURE

Applications are approved on the basis of the required documents. Approved candidates will be invited to a 30 minutes interview, in English or in Italian, aiming to assess their skills, knowledge and attitudes toward research within the PhD School's main fields: Economics and Finance, Mathematics, Statistics, and Economic Geography.

The Appendix contains a description of minima prerequisites required for each of the 4 fields. The candidate must meet the requirements of at least one field. During the interview the candidate will be assessed in the

field of expertise and he/she will be asked to discuss his/her research proposal and personal academic objectives.

The list of candidates selected for the PhD program will be posted on line two days after the interviews

PHD ADMISSION COMMITTEE

The members of the PhD Admission committee will be appointed immediately after the deadline for application.

ASSESSMENT CRITERIA

Candidates will be assessed based on a number of criteria, the highest ranking candidates will be invited to the interview with the PhD admission committee.

Each candidate will be assessed on the basis of the information provided in the required documents.

The number of points that can be appointed is:
1) The awarded degree and the final grade: up to 10 points
2) Publications: up to 10 points
3) Previous research experience: up to 5 points
4) The project proposal: up to 35 points
A maximum of 60 points can be appointed. To be eligible for the interview the candidate must get a minimum of 40 points.
Up to 60 points can be assigned to the interview's result. To be eligible for the grant a minimum of 40 points must be assigned.

Essential Bibliography for the interviews

Economics.
Microeconomics: *Consumer theory. Production theory. Market structures and externalities*
Macroeconomics: *The IS-LM model. The AD-AS model. Phillips curve. Ramsey model.*
Economic Policy: *The normative model of economic policy. Fiscal policy. Monetary policy.*

Books:
   - **Varian H. R**., Microeconomic Analysis, Norton & Company.
   - **Blanchard, O.J**., Macroeconomics, Pearson 5th edition

- **Acocella, N.** Fondamenti di Politica Economica, Carocci (*Eng. Ed.: The Foundations of Economic Policy, Cambridge University Press*)
- **Stiglitz, J.** , Economics of the Public Sector, Norton & Company

Development Economics.

Basics principles of development economics; impact evaluation of development policies and programs; poverty and vulnerability analysis; international trade, economic growth and inequality; international finance and development; labor and migration: sustainable development and environment; common property resources and determinants of cooperation; agriculture for development and the economics of farm households.

Books:
De Janvry and E. Sadoulet (2016), Development Economics: Theory and Practice, Routledge, UK**.**

Economic Geography

Regional development theories; the spatial behavior of firms; spatial agglomeration, regional disparities and regional specialization; local and global production networks; sustainable development, the environment and the climate crisis; innovation, technology and space; the geography of development; urban and regional policies; basics in digital cartography; foundations of statistical methods for geography and spatial analysis.

Books:
- **Sheppard E., Barnes T.J.**, *A Companion to Economic Geography*, Wiley-Blackwell, 2017.
- **Cumbers A., MacKinnon D.**, *An Introduction to Economic Geography: Globalization, Uneven Development and Place*, Routledge, 2019 (3rd edition).
- **Martin R.**, *Economy: critical essays in human geography*, Routledge, 2018.
- **Rogerson P.A.**, *Statistical methods for geography: a student's guide*, Sage, 2020 (fifth edition).
- ***Clark G.L. et al.,*** *The New Oxford Handbook of Economic Geography*, Oxford University Press, 2018.

Mathematics
Basic notions of calculus. Implicit functions, homogeneous functions. Free or constrained maxima and minima. Elements of utility theory. Pareto problems.
Linear algebra. Ordinary Differential Equations, systems of linear differential equations. Dynamic systems: equilibrium and stability.

Probability
Set theory, Random Variables; Conditioning, Convergence Theorems, Central Limit Theorem, Law of Large Numbers, Markov Chains.

Books:
- **Guerraggio, A., Salsa, S.**, Metodi matematici per l'economia e le scienze sociali, Giappichelli, 1997.
- **Simon, C. – Blume, L.E.**, Matematica per l'Economia e le Scienze Sociali, Università Bocconi Editore, 2002.
- **Ross, S.,** Calcolo delle probabilità, Apogeo 2004.

- **Chang, A., Wainwright, A.** (1967) Fundamental Methods of Math-ematical Economics (available on-line).
- **Peccati, L., Salsa, S. and Squellati, M.** Mathematics for Economics and Business, EGEA, 2008
- **Intriligator, M.D.** (1971) Mathematical Optimization and Economic Theory, Prentice Hall Series in Mathematical Economics .
- **Takayama, A.,** (1985) Mathematical Economics, Cambridge Univ. Press.
- **Blitzstein, J.K., Hwang, J.** (2019) Introduction to Probability, CRC Press.
- **Liseo, B.,** Appunti per il corso di probabilità e processi stocastici, on line at https://sites.google.com/a/uniroma1.it/brulis/probabilita-e-processi-stocastici-17-18

Statistics

Sampling distributions, estimators, sufficient statistics. Linear and generalized linear models, OLS theory. Multivariate analysis.
Index numbers, national income models, income, consumption and productivity measurement. Time series analysis, panel data analysis, regression and causality.

Books:
- **Wood, S.** Core Statistics, CRC Press, 2014.
- **Azzalini A.** Inferenza Statistica, Springer Italia, 2001.
- **Di Ciaccio A., Borra S.,** Statistica: metodologie per le scienze economiche e sociali, Mc Graw Hill 2007.
- **Stock J., Watson M.,** Introduction to Econometrics, Pearson 3rd edition.
- **Guarini R., Tassinari F.,** Statistica Economica, Il Mulino, 2000.
- **Angrist J., Pischke J.S.,** Mostly Harmless Econometrics, Princeton University Press, 2009.
- **Dekking, F.M., Kraaikamp, C., Lopuha H.P., Meester L.E ,** A Modern Introduction to Probability and Statistics: Understanding Why and How, Springer 2005