

6.00 credits

52.5 h + 22.5 h

Q1

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| Teacher(s)                  | Draye Xavier (coordinator) ;Gaspard Frédéric ;Symul Laura ;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Language :                  | French<br>> English-friendly                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Place of the course         | Louvain-la-Neuve                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Learning outcomes           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Evaluation methods          | partim B : homework in groups                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Teaching methods            | partim B : lectures in English, homework                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Content                     | <b>LBIRA2110B – Applied Econometrics</b><br>Introduction to the different data types (cross-sections, time series, panel data) and to the small-sample and large-sample justifications of the OLS estimators<br>Cross-sections : typical exceptions to the Gauss-Markov assumptions, sources of endogeneity, IV estimators<br>Time series : the problem of non-stationarity, unit root tests, a few typical econometric specification for time series (Koyck, ECM,...)<br>Panel data : fixed effect model vs random effect model, the unifying Mundlak approach |
| Inline resources            | partim B (Applied Econometrics): Documents used during the lectures (plans, tables, graphs,...) are available for the students on Teams.                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Faculty or entity in charge | AGRO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

| Programmes containing this learning unit (UE) |         |         |              |                                                                                     |
|-----------------------------------------------|---------|---------|--------------|-------------------------------------------------------------------------------------|
| Program title                                 | Acronym | Credits | Prerequisite | Learning outcomes                                                                   |
| Master [120] in Agricultural Bioengineering   | BIRA2M  | 6       |              |  |