Syllabus for Experimental Economics II: Replications

Classroom and Time: Tuesday 9:10am-12:10pm at Social Sciences 608 (社科 608 教室) Class website: <u>http://homepage.ntu.edu.tw/~josephw/replication_23F.htm</u> Instructor: Joseph Tao-yi Wang (josephw "at" ntu.edu.tw) Office: Social Sciences 754 Office Hours: Tuesday 12:10-1pm after class or by email appointment

This is an English capstone course of experimental economics at the upper division and graduate level, focusing on replications. The purpose is to computationally replicate several assigned experimental papers, and choose a particular paper to propose a replication experiment. You may submit replication reports in groups of two, but are required to submit the final experimental proposal and pre-analysis plan individually. Specific course goals include:

- 1. **Present Contemporary Research**: Students are expected to read journal articles or working papers, evaluate their quality, present them, and provide feedback to others.
- 2. <u>Complete Replication Report</u>: Students are expected to run the author-provided code/data to computationally replicate journal articles and write replication reports.
- 3. **Design Replication Experiment**: Students are expected to design a replication experiment and propose a pre-analysis plan. To conduct the experiment, the pre-analysis plan has to be pre-registered, say on <u>Open Science Framework</u>.

Required and Recommended Reading:

- 1. Moffatt (2019), <u>Experimetrics Lecture Notes</u> for NTU mini-course. (Emt)
- 2. Moffatt (2016), Experimetrics: Econometrics for Experimental Economics, Palgrave.
- 3. Instructions for Computational Reproducibility and Replication, Institute for Replication.
- 4. Gilad Feldman's replications website: <u>http://mgto.org/pre-registered-replications/</u>
- 5. Gentzkow and Shapiro (2014), "Code and Data: A Practioneer's Guide," mimeo.

Assignments:

- 1. Presentation (30%): Present papers you replicate and Experimetrics Lecture Notes.
- Replication Reports (40%): Conduct four computational replications for assigned papers (R1, R2, R3, R4 due on <u>9/25</u>, <u>10/16</u>, <u>11/13</u>, <u>12/4</u>, or on week 4, 7, 11, 14).
- 3. Proposal for Experimental Replication and Pre-Analysis Plan (30%): Due $\underline{12/19}$.

Pre-Requisites: This is a capstone course in economics, which assumes you know everything taught in the required courses for an economics major. You will also need basic knowledge of Experimental Economics I: Behavioral Game Theory. If you have not taken that course, you will have to take the online version (on Coursera) concurrently, learn it yourself via NTU OCW or read Camerer (2003), <u>Behavioral Game Theory</u>, Princeton University Press. Graduate econometrics is highly recommended though knowledge of STATA/Matlab/R is sufficient, as data analysis is central to computational reproducibility.

Course Outline:

Week 1: [9/5] Introduction to Replication (Lin et al., 2020) and Power Analysis (Emt 1.1-1.4) Week 2: [9/12] Replication 1: Andersen et al. (2011) and its TA Discussion (Emt 2.1-2.3) Week 3: [9/19] R1 Presentation; Replication 2: Saccardo and Serra-Garcia (2023) (Emt 3.1) Week 4: [9/26] TA Discussion of Replication 2 (**R1 due 9/25**) Week 5: [10/3] R2 Presentation (Due 10/16) (Emt 3.2-3.3) Week 6: [10/10] National Holiday (No Class) Week 7: [10/17] Replication 3: <u>He, Analytis and Bhatia (2022) (**R2 due 10/16**) (Emt 3.4-3.9) Week 8: [10/24] (Midterm Week) TA Discussion of Replication 3 Week 9: [10/31] Pre-Analysis Plan/Basic Principles of Experimental Design (Emt 3.10-3.11) Week 10: [11/7] R3 Presentation (Due 11/13) (Emt 4.1-4.2) Week 11: [11/14] Replication 4: Lin et al. (2020) (**R3 Due 11/13**) (Emt 4.3) Week 12: [11/21] TA Discussion of Replication 4 (Emt 5.1-5.4) Week 13: [11/28] R4 Presentation (Due 12/4) (Optional: Emt 16.1-16.3) Week 14: [12/5] Final Proposal Presentation (**R4 due 12/4**) (Optional: Emt 16.4-16.6) Week 15: [12/12] Final Pre-Analysis Plan Presentation (Due 12/19)</u>

Papers to Replicate:

- 1. Andersen, Ertaç, Gneezy, Hoffman and List (2011) "Stakes Matter in Ultimatum Games," American Economic Review, 101(7), 3427-3439.
- Saccardo and Serra-Garcia (2023), "Enabling or Limiting Cognitive Flexibility? <u>Evidence of Demand for Moral Commitment</u>," American Economic Review, 113(2), 396-429.
- 3. He, Analytis and Bhatia (2022), "<u>The Wisdom of Model Crowds</u>," Management Science, 68(5), 3635-3659.
- Lin, Brown, Imai, Wang, Wang and Camerer (2020), "Evidence of General Economic Principles of Bargaining and Trade from 2,000 Classroom Experiments," Nature Human Behaviour, 4(9), 917-927.