Economics Capstone Syllabus. Fall 2016.

1 Index

1. About the course

2. Logistics

3. Course structure and format

4. Specific goals

5. Assessment and deliverables

6. Attendance and Participation

7. Course schedule

8. IMPORTANT DATES

9. FAQs

10. Links

2 About the course

The Economics capstone is designed to be the culmination of a students exploration and study of economics topics. The primary objective of the capstone is to develop and apply the skills required to write original research. It will provide experience that is particularly valuable for students interested in careers that require producing rather than just consuming economic analysis and/or those seeking to pursue graduate programs (including economics, business, public policy, and international relations).

The Economics Capstone Seminar 1 serves as a space for students working on their capstones to jointly reflect on their research progress, and learn specific skills/approaches from faculty in the Economics major that will aid them with their capstone work.

The Economics Capstone 1 course is NOT a methods course. All capstone students are assumed to have already received training in economics methods before they commence their capstone or, at the very least, are taking a methods course concurrently. Methodological questions will be addressed during the course but these discussions should be seen as an advanced refresher, rather than an introduction to a methodological approach.

go back to Index

3 Logistics

• Meeting times: Wednesday, 12.30pm-3.30pm, Classroom Y-RC3-CR18 (in short, Cendana, 18)

• Instructor: Guillem Riambau-Armet. Cendana, office 02-04

1

- Office hours: Always by appointment. Tuesday 11-12-30 and Thursday 9-11
- e-mail: guillem.riambau@yale-nus.edu.sg

go back to Index

#### 4 Course structure and format

You will be meeting the Capstone Coordinator once a week. However, the whole group will not need meet every week. See below for a precise schedule of the semester.

go back to Index

# 5 Specific goals

Other than the wider aforementioned general goals stated above in 2, there are a few specific objectives for this semester

• Learn how to craft a precise and implementable research question. Note that the choice of words is not trivial. The research question has to be precise. For instance, "What is the effect of housing policies on marriage rates?" is a very interesting question, but too broad. One could write ten books to approach it. A better question in this regard could be something like "How does the legal scheme for purchasing of HDB flats in Singapore affect marriage rates in the country?". This would still be broad, but it would give a better focus. Broad questions are fine, but it's hard to give precise answers to broad questions. "Does the law that prevent under 35 year old singles from purchasing HDB flats increase marriage rates among that subset of the population?" is even more precise, and hence, easier to have a precise answer for.

In economics, in general, we prefer unambiguous unidimensional answers. For instance, "What caused the French Revolution?" is a question that most (if not all) economists would have an interest in. But a question that an economist would choose to do research on would be more like "Did agricultural hardships at the local level increase the degree of violence during the French Revolution?". This could help us understand up to what point an exogenous shock like a draught could have played a role in such a critical historical event such as the French Revolution.

The second key word is *implementable*. following on the same example it would only make sense to carry out such a project if one had access to a dataset that included individual information on age, gender, wage, HDB applications, marital status, education, HBD prices (and expectations) on the one hand, and about the precise timing of the enactment and implementation of all laws regarding HDB purchasing in Singapore on the other.

All students should be aware that there will be major time and resource constraints. Hence, major emphasis will be put in semester one upon designing a project that can be implemented within the 20 weeks following the end of the semester.

- Find what the best method to answer your research question is. It is critical that you clearly define how you will undertake this question. You can write down a model that includes all variables and makes some predictions. Alternatively, or, in conjunction, you can choose to analyse some field or archival data. Or, alternatively, you may prefer to run a field or a lab experiment, and collect the data yourself.
- Learn to be creative. A couple of examples on how to overcome major data issues (both actually used by economists). Suppose you need data on rainfall for Spain during the 15th and 16th centuries. Obviously, there is no data for that (regular, methodological and geographically spread data collection only started in the 19th century). One way to go around it is, for instance, look at the number of masses devoted to praying for rain in any given year. This could give a relatively good local estimate of rainfall for that year, and for food scarcity the next. See War and Inquisition: Repression in Early Modern Spain, by Jordi Vidal-Robert.

Another example: suppose you need data on people's daily schedules for England during the First Industrial Revolution. One way to get a consistent idea of people's schedules back then is to check judiciary archival data from the time. All witnesses have to account for what they saw, when, where, and what they were doing at the time. Hence, a systematic look through many of such witnesses' reports can give the researcher a good sense of what was the typical daily schedule of the English people back then. See Time and Work in Eighteenth-Century London, by Hans-Joachim Voth.

• Always remember: as long as the question is interesting, and the methodology strong, you do not need to worry about significance of the results.

#### 6 Assessment and deliverables

Assessment will be based on presentations, participation, attendance and written submissions.

- 2 presentations: preliminary presentation (Sept. 28) and final presentation (October 26 or November 2). [Note: the presentations of week 2 will not be graded formally ]
- 1 discussion (October 26 or November 2)
- 1 Referee report (due on October 5, assigned on September 14)
- Initial written proposal (October 21)
- Preliminary draft (November 16)

Participation and attendance: 5% Everything else: 15%

go back to Index

#### 6.1 Attendance and Participation

Learning in this course heavily relies on feedback received from your classmates. It is bearing this in mind that attendance rules will be stricter than generally for the major. Hence, late arrivals or unjustified absences will not be permitted. To this avail:

- 1. Each student can have one unexplained absence from class without suffering any penalty. Every further unexplained answer will drop the grade by 10%, with no exceptions.
- 2. Regular late arrivals will not be permitted: any 3 late arrivals will drop the grade by 5%

go back to Index

#### 7 Course schedule

August 10: Preliminaries. Guest: Martin V. Day (Assistant Professor of Psychology, Memorial University).

Pre-assigned readings:

• Capstone guidelines and regulations (Yale-NUS internal document).

August 17: Short presentations of area of interest + preliminary lit. review. Fundamentals of research.

Pre-analysis plans. Replicability. Ethics checklist and forms. Latex tips.

Pre-assigned readings:

- Conducting safe and ethical research (Yale-NUS internal document). Link here.
- Best Practices for Data and Code Management. Link here.
- Benjamin A. Olken: *Promises and Perils of Pre-Analysis Plans*. Journal of Economic Perspectives, Volume 29, Number 3, Summer 2015, pages 6180.

August 24: Guest: Xing Xia.

August 31: Individual meetings

September 7: Guest: Yu-Hsiang Lei and Rene Saran

September 14: Referee reports assigned.

September 21: BREAK

**September 28:** Preliminary presentations (1). In depth presentation of area of interest.

October 5: Individual meetings. Referee reports due.

October 12: How to present your work. How to discuss and assess others' work. [October 21 (Friday).

Initial written proposal to be submitted to capstone coordinator and discussant.

October 19: Individual meetings

October 26: Final presentations, if needed.

November 2: Final presentations. Note: we may need to extend class by half an hour on this day.

**November 9:** Discussion and evaluation of semester 1. What next?

go back to Index

### 8 IMPORTANT DATES

Note that dates highlighted in bold are college wide dates. Hence, they are *strictly* non negotiable.

- Week 2. August 19, 3pm: Capstone Proposal Registration Form
- Week 3. August 25, Thursday, 3pm: Submit all forms for ethics clearance if needed. See forms below.
- Week 3. August 26, Friday. Submit all forms for funding (note this is the only college wide deadline with some potential for extension). See forms below.
- Week 7. September 28: Preliminary presentation of capstone research project.
- Week 8. October 5: Referee report due.
- Weeks 10 October 21 (Friday). Initial written proposal to be submitted to capstone coordinator and discussant.
- Weeks 11 and 12. October 26 / November 2: Final presentation of capstone research project, with discussions.

- Week 13. November 11, 3pm: Student and supervisor submit form. ('In progress Semester 1 assessment form').
- Week 13. November 16, 3pm: Submission of preliminary draft.

go back to Index

## 9 FAQs

See webpage for general FAQs.

- 1. Who can be my adviser? How should I decide who the beset person could be?
  - This will mainly depend on the topic. The captsone coordinator will make an initial suggestion, and we will work from than onwards.
- 2. When should I finally decide my main adviser?

This should be happening at the second half of semester 1.

3. What if I need funding?

There are some funds available to you, up to \$500 with the authorization of the relevant Head of Studies.

go back to Index

#### 10 Links

**Internal Yale NUS forms and documents:** (Note that you may need to VPN if you are getting these forms from outside campus)

- Economics Capstone Website
- Ethics in research Website
- Capstone Project Guidelines and Regulations
- Yale-NUS Safety and Ethical Research guidelines
- Capstone Proposal Registration Form
- Project Ethics and Safety Checklist (PESC)
- Project Ethics Clearance Form (PECF)
- Participant Information Sheet (PIS)
- Informed Consent Form (ICF)
- Fieldwork Safety Plan (FSP)
- $\bullet\,$  Forms for funding are available at the Canvas webpage

### External documents and links:

 $\bullet$  Reproducible Research: Best Practices for Data and Code Management

go back to Index