**ECONOMICS EC9601A-001**

**Department of Economics**

**Western University**

**September 2021**

**General Information:**

**Instructor:**                  Victor Aguiar

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**Office hours:**              TBA

**Meeting time(s) & location(s):** TTh 1:00-2:30pm, Zoom Meeting

**Course website:**         <https://owl.uwo.ca/portal>

**Graduate inquiries:**  519-661-3505 or Room 4074 SSC or [econ-gradcoordinator@uwo.ca](mailto:econ-gradcoordinator@uwo.ca)

**Course Description/Overview:**

This a core course in the first-year Ph.D. program.  Accordingly, it covers portions of microeconomic theory which are needed to do research in any field of economics.  This particular course covers consumer theory, general equilibrium without production, producer theory, general equilibrium with production, and finally, social choice theory.

**Course Learning Outcomes:**

(1) To maximize an objective subject to one or more constraints.

(2) Students will use those techniques to analyze a consumer's choice of consumption goods subject to a budget constraint.

(3) Students will also use those same techniques to analyze a producer's choice of inputs subject to a technological constraint.

(4) Students will use the same techniques, as well as others, to explore the relationships between Pareto efficiency, the core, Walrasian equilibrium, and weighted utilitarian maximization.

**Textbook(s):**

MGW Microeconomic Theory. Class Notes.

**Topics and Reading List:**

Examinations will be based solely on the main text (Mas-Colell, Whinston, and Green (1995)), lectures (lecture notes) and the problem sets. However, students can supplement their understanding with the following material.  Readings have been arranged from the least challenging to the most challenging.

The bookstore carries Jehle and Reny (2011) (an advanced undergraduate text), and Debreu (1959) (a challenging and impeccable classic).  None of these books are required.  In addition, Varian (2014b) and Varian (2014a) are available in the bookstore for undergraduate courses (these two books appear to be close substitutes).

The content of each lecture is just a guide (i.e., we may need more time in one topic if needed and less in others) however we are going to cover all topics mentioned in this syllabus.

* Class 1: Choice-based consumer theory. Walrasian demand.
* Class 2: Comparative statics of demand. The weak axiom of revealed preference (WARP).
* Class 3: Implication of the WARP. Slutsky matrix.
* Class 4: Classical preference-based demand theory. Preference relations.
* Class 5: Utility representation of preferences.
* Class 6: The utility maximization problem. Walrasian demand correspondences. The indirect utility function.
* Class 7: Properties of the indirect utility function. Expenditure minimization problem. The expenditure function properties.
* Class 8: Relationship between the expenditure and indirect utility functions. Hicksian demand correspondence. Properties of the compensated demand. Slutsky matrix for the rational case. Roy's identity.
* Class 9: Integrability. Recovering expenditure from demand. The strong axiom of revealed preferences SARP. Afriat's Theorem.
* Class 10: Aggregate demand. Gorman forms. WARP in the aggregate. The representative consumer assumption.
* **Midterm Exam (May change its position depending on the pace of the class).**
* Class 11: Producer Theory. Production set and its properties. The profit maximization problem. Supply correspondence and profit function.
* Class 12: Properties of supply and profit function. Hotelling's lemma. Matrix of price effects and the law of supply. Cost minimization problem. Conditional input demands, the cost function and properties. Sheppard's lemma. Aggregation theory of the producer.
* Class 13: Partial Equilibrium Model. Basics of General Equilibrium. Exchange and production functions. Pareto efficiency. The Walrasian competitive equilibrium. The core.
* Class 14: The first welfare theorem. Price equilibrium with transfers.
* Class 15: The second welfare theorem.
* Class 16: Existence of Equilibrium. Properties of aggregate excess demand.
* Class 17: Local uniqueness of equilibrium. Regular economies. The Sonnenschein-Mantel-Debreu theorem.
* Class 18: Uniqueness of equilibrium. WARP in the aggregate. Gross substitutes property. Comparative statics and stability of equilibrium.
* Class 19: Expected Utility Theory. General equilibrium under uncertainty. Arrow-Debreu Equilibrum.
* Class 20: Sequential trade. Ex-ante and ex-post efficient allocation of risk in the Arrow-Debreu Equilibrium. Arrow securities. Radner equilibrium. Equivalence of Arrow-Debreu equilibria and Radner equilibria under Arrow securities. Market incompleteness.
* Class 21: Matching.
* Class 22: Random utility and Logit.
* Class 23: Behavioral Consumer Theory.

Class 24: Behavioral General Equilibrium.

**Evaluation:**

Students are expected to participate in the lectures (Tuesdays and Thursdays 1-2:30pm online; to participate in the tutorials (TBA); to complete the weekly problem sets (distributed on Thursdays and due at the start of the tutorial the following week); to write the midterm examinations (in lieu of the lecture on Thursday, October 29); to read the notes and text and participate actively in class; and to write the final examination (yet to be scheduled).  The course mark will be determined by the problem sets (best 2 out of 10 at 1% each, 8% total), the midterm (31%), class participation (11%); and the final examination (50%).  Note that economics graduate students should focus on the core examinations in summer 2020 (rather than on the course marks in fall 2019).

**Teaching Assistant**: Xun Chen will be holding office hours on TBA.

**Department Policies**

**Policy on Academic Offences:**

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following web site:

<http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_grad.pdf>

All required papers may be subject to submission for textual similarity review to the commercial plagiarism‐detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between the University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

Statement on Mental Health and Support Services  
Students under emotional/mental distress should visit <http://uwo.ca/health/mental_wellbeing/> for more information and a complete list of resources on how to obtain help.

## Technical Requirements:

* Laptop or computer
* Stable internet connection
* Microphone
* Webcam

For technical support, see the OWL Help page or contact Western Technology Services Helpdesk (<https://wts.uwo.ca/about-wts/contact.html>). Google Chrome or Mozilla Firefox are the preferred browsers for OWL; update your browser frequently.

## Professionalism, Privacy and Copyright:

* Students are expected to follow the [Student Code of Conduct.](https://www.uwo.ca/univsec/pdf/board/code.pdf)
* All lectures and course materials, including slides, presentations, outlines, and similar materials, are protected by **copyright**. Students may take notes and make copies of course materials for their own educational purposes only.
* Students may not record lectures, reproduce (or allow others to reproduce), post or distribute lecture notes, assessments, or any other course materials publicly and/or for commercial purposes without written consent.
* Recordings (audio or video) are not permitted without explicit, written permission. Permitted recordings may not be distributed or shared.
* Students are expected to follow online etiquette expectations provided on OWL *(if applicable; otherwise delete this bullet point)*

## Notice of Recordings:

All of the remote learning sessions for this course will be recorded. The data captured during these recordings may include your image, voice recordings, chat logs and personal identifiers (name displayed on the screen). The recordings will be used for educational purposes related to this course, including evaluations. The recordings will not be posted but may be disclosed to other individuals participating in the course for their private or group study purposes.

If you have concerns regarding your information on the recordings, please contact the instructor ([vaguiar@uwo.ca](mailto:vaguiar@uwo.ca)) using your UWO email. In the email, please state your name and an appropriate alias that you will be using (i.e. Purple007) during the learning session.

Participants in this course are not permitted to record the sessions, except where recording is an approved accommodation, or the participant has the prior written permission of the instructor.