THE UNIVERSITY OF WESTERN ONTARIO DEPARTMENT OF PHILOSOPHY

Philosophy 2020: Basic Logic Course Outline Summer 2016

Instructor: Dr. Nicholas D. McGinnis (nmcginn2@uwo.ca)

Office: Stevenson Hall, room 3137 Office Hours: 12:00-1:00 PM Mon-Thu Monday to Friday 9:30 a.m.-12:00 p.m. P&AB 148

OBJECTIVES

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PROLEGOMENA TO CARDINAL ARITHMETIC
*54.42. Fira e 2. Dr. B Ca. 7 1 B. B + a. # . Bei"a
F. *54.4. ⊃ F :: α = ε'ευ ε'y. ⊃ :.
                [*13·12]  \exists f: \alpha = t'x \lor t'y . x + y . \exists . \alpha + t'x . \alpha + t'y 
f.(1).(2).\supset f:: \alpha = t'x \lor t'y.x + y.\supset :.
                                      \beta \subseteq \alpha . \alpha ! \beta . \beta + \alpha . \equiv : \beta = \iota' x . v . \beta = \iota' y :
                                                             \equiv : (\Im z) \cdot z \in \alpha \cdot \beta = t^*z :
[#37·6]
F.(3). #11·11·35. #54·101. ⊃ F. Prop
\vdash .*54 \cdot 26 . \supset \vdash z. \alpha = t'x . \beta = t'y . \supset : \alpha \lor \beta \in 2 . \equiv . x + y .
                                                              \equiv \cdot \alpha \cap \beta = \Lambda (1)
        [#13·12]
        F.(1).*11:11:35.5
             \vdash : ( \exists \alpha, y) \cdot a = \iota^{\epsilon} x \cdot \beta = \iota^{\epsilon} y \cdot \exists : \alpha \circ \beta \in 2 \cdot \exists : \alpha \circ \beta = \Lambda (2)
        F.(2).*11.54.*521.⊃ F. Prop
    From this proposition it will follow, when arithmetical addition has been
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Bertrand Russell and A.N. Whitehead prove that 1+1=2. (Principia Mathematica, p. 379).

Modern formal logic including argument structure, propositional logic and elementary quantification. After basic concepts are introduced, two systems will be taught: sentential and quantificational logic. The goal is a robust working knowledge of basic formal logic.

In addition, applications to everyday reasoning and to computer "thinking" will be considered, along with related issues in metaphysics, semantics and the philosophy of logic. Intended primarily for students not planning further studies in Philosophy or Logic.

Please note: this is a six-week accelerated Summer day course, running for two and a half hours *five days a week*: a full-term course in the period from July 4th to August 12th (plus final exam). The pace will be quick; the workload heavy; yet the rewards great.

MATERIALS

For All X – The Lorain County Remix, freely available at www.forallxremix.org under a Creative Commons license; bound copies can be purchased at the Western Print Shop at cost. Supplemental materials will be made available by the instructor on OWL.

REQUIREMENTS

Mid-Term Exam: 30% Final Exam: 30%

Assignments (12): 40% - (ten best will be counted)

COURSE SCHEDULE

Assigned Reading from 'For All X'

Week 1: July 4-8 PART I – Basic Concepts: Chapters 1, 2, 3

Week 2: July 11-15 PART III – Sentential Logic: Chapters 6, 7

Week 3: July 18-22 PART III – Sentential Logic: Chapter 8

Week 4: July 25-29 PART IV – Quantificational Logic: Chapter 9

Week 5: August 2-5 PART IV – Quantificational Logic: Chapter 10, 11

Week 6: August 8-12 PART IV – Quantificational Logic: Chapter 11; excerpt from Gensler,

H. "Introduction to Logic," ch. 18 Philosophy of Logic (OWL).

29 classes / 72.5 hours

Late penalty policy:

Each paper will be subject to a 5% penalty on the first day that it is late, and a further 1% penalty for each subsequent day it is late (including each day of the weekend) until the last day of the semester, at which point a grade of 0 will be automatically entered (following Senate guidelines set out on page 117 of the UWO 2015-16 Academic Calendar).

Students are directed to view the Policy on Accommodation for Medical Illness: (https://studentservices.uwo.ca/secure/index.cfm).

Policy on accommodation for medical illness of work worth less than 10% of the total course grade:

Medical documentation will be required; such documentation must be submitted by the student directly to the appropriate Faculty Dean's office and not to the instructor. It will be the Dean's office that will determine if accommodation is warranted.

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 undergrad.pdf

Support Services:

Students who are in emotional/mental distress should refer to Mental Health@Western http://www.uwo.ca/uwocom/mentalhealth for a complete list of options about how to obtain help.

Statement on Use of Plagiarism Software:

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 Use of Electronic Devices:

The use of electronic devices will not be permitted for the final exam in this course.

Additional Links:

Registrarial Services (http://www.registrar.uwo.ca)

Student Support Services (http://westernusc.ca/services/)

Audit:

Students wishing to audit the course should consult with the instructor prior to or during the first week of classes.

The Department of Philosophy Policies which govern the conduct, standards, and expectations for student participation in Philosophy courses is available in the Undergraduate section of the Department of Philosophy website at http://www.uwo.ca/philosophy/undergraduate/policies.html It is your responsibility to understand the policies set out by the Senate and the Department of Philosophy, and thus ignorance of these policies cannot be used as grounds of appeal.