Anthropology 2110 Biology of Human Variation Fall 2019

Professor: Dr. Tamara Varney Location: AT1010

Lecture time: Tues 7-10pm

Phone: 807-343-8204

Office: Braun Building 2001C Email: tvarney@lakeheadu.ca

Office Hours: by appointment OR you can phone, email or drop in anytime to see if I am free – just be

prepared to come at another time if I am busy with something I cannot interrupt

I cannot guarantee that I will respond in a timely fashion if messages are left on my voice mail rather than email and students should NOT expect less than **24 hour** turnaround time to email messages. Please DO NOT assume that your message, voice or email, has been received unless you receive an acknowledgement.

Course Description:

This course focuses on human microevolution. Topics include evolutionary theory, the genetic background of human variation, the distribution of human variation, human adaptability, and the role of disease and other influences on human evolution.

Required Textbook: (available at the University Bookstore)

Mielke JH, Konigsberg LW and Relethford JH. 2011. Human Biological Variation.

2nd Edition. Oxford University Press. ISBN 13: 978-0-19-538740-7

Also see the course Desire2Learn (D2L) site (look in MyCourseLinks on the LU website) for additional resources.

Evaluation:

Your final grade will be based on:

| Term Test 1 | 30% | Oct 8 |
|-------------|-----|--------|
| Term Test 2 | 25% | Nov 19 |
| | | |

Final Exam 45% Final examination period – Dec 5-15 **Note exam contingency

date is Dec 16st.

Please note that **Fri**, **November 8**, **2019** is the last date for withdrawal without academic penalty from this course. Students should have received feedback on 25% of the course mark by that date.

<u>Accommodations</u>: Lakehead University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you think you may need accommodations, you are strongly encouraged to contact Student Accessibility Services (SAS) and register as early as possible. For more information, please visit: http://studentaccessibility.lakeheadu.ca

<u>Missed tests</u> will not be made-up unless official documentation of a reasonable excuse is submitted (e.g. student or family illness, death of family member, car accident). Please note that that going off on holidays or leaving early at the end of term OR similar <u>do NOT</u> constitute reasonable excuses. Please contact me within **48 hrs.** of any missed due date or test for <u>ANY</u> reason. In case of

snowstorm, hwy closures and warnings – these are acceptable and <u>verifiable</u> reasons to miss class – but again, *contact me ASAP*.

Students are strongly advised to familiarize themselves with the <u>Student Code of Conduct</u> (http://policies.lakeheadu.ca/policy.php?pid=60) with regard to <u>both</u> academic and non-academic misconduct. Non-compliance will NOT be tolerated in this course and the code will be adhered to in terms of disciplinary action.

Study Tutorials: it has been my practise in past years to hold some supplementary but highly recommended, out of class time pre-test tutorials upon request. These are held as long as they are requested by students at least 2 weeks prior to tests and they will be scheduled around the availability of the majority of those interested. Which means → more than one may be held before a test in order to accommodate as many as possible. These are meant to be <u>interactive</u> – students bring their questions and topics they wish to explore.

Tentative Class schedule:

| Week | Date | Topic | Text/Readin |
|------|---------|---|---------------------|
| | | | g |
| 1 | Sept 3 | History of Study: Human Variation | ch 1 |
| 2 | Sept 10 | Genetic Basis of Human Variation | ch 2, 3 |
| 3 | Sept 17 | Inheritance of simple traits: blood group and polymorphisms | ch 4, 8 |
| 4 | Sept 24 | Inheritance of simple traits 2: plasma proteins, RBC enzymes, HLA | 5, 6 |
| 5 | Oct 1 | Inheritance of simple traits 3: Hemoglobin variants and DNA Markers | 7, 9 |
| 6 | Oct 8 | Term test #1 – approx 2-2.5 hrs** | |
| 6 | Oct 15 | BREAK WEEK – NO CLASS | |
| 7 | Oct 22 | Epigenetics - film – Ghost in the Genes – watch and do suggested readings before class on your own – a brief lecture will be given followed by discussion on the topic during classtime – DO READINGS – IF NO ONE PARTICIPATES IN DISCUSSION THERE WILL BE NO DISCUSSION! | See D2L |
| 8 | Oct 29 | Traits of Complex Inheritance & their adaptations I: introduction, anthropometrics, growth and development | 10, 11 to p. 280 |
| 9 | Nov 5 | Traits of Complex Inheritance & their adaptations | 11 from p |

| | | II: environmental adaptations | 280, 12 | |
|----|---------------|---|---------|--|
| | | | | |
| 10 | Nov 12 | Population Structure & History; Changing Dimensions of the Human Species: Demographic and Epidemiological Transitions | 13 | |
| | | | | |
| 11 | Nov 19 | Term test #2 – approx 2-2.5 hrs** | | |
| | | | | |
| 12 | Nov 29 3 | Human Variability and Behaviour | 14 | |
| | | | | |
| | Dec 5-15 | Final Exam | | |
| | Final Exam | ++ Note - contingency date is Dec 16st | | |
| | Period | exam timetable is generally released in early to mid Oct. Do not make travel plans for the holidays beforehand so that you do not miss your exam. | | |

^{**} Note: *if necessary*, a brief lecture <u>may</u> be given following tests