

Anthropology/Biology 3138: 2016
Introduction to DNA Molecular Methods

Instructor: Carney Matheson
Office Hours: BB2001E (Braun Building) 343 8743 or cmatheso@lakeheadu.ca
Time & Place: Lecture/Laboratory Wednesday 9:30 pm – 12:30 pm
Marks & Grading: Lab Reports 50% (5 laboratory write ups worth 10% each)
Midterm Exam 15%
Final Exam 20%
Assignment 15%

Schedule:

September 7:	Lecture 1	Basic Techniques The Nature of DNA Extraction Chemistry
September 14:	Laboratory 1	Laboratory Safety Basic Laboratory Techniques
September 21:	Laboratory 2	The Nature of DNA
September 28:	Lecture 2 Laboratory 3	Purification Chemistry Extraction Methodologies
October 5:	Lecture 3 Laboratory 3	DNA Detection and Quantification Extraction Methodologies
October 12:	Mid-Semester Study Break	
October 19:	Midterm	
October 26:	Lecture 4 Laboratory 3	History of the Polymerase Chain Reaction Extraction Methodologies
November 2:	Lecture 5 Laboratory 4	Electrophoresis PCR Amplification
November 9:	Lecture 6 Laboratory 4	DNA Sequencing PCR Amplification
November 16:	Lecture 7 Laboratory 5	DNA Data Analysis DNA Sequence Analysis
November 23:	Lecture 8 Laboratory 5	Various other techniques Sequence Alignment
November 30:	Lab and Final Exam	