

**Anthropology/Biology 3138: 2018**  
**Introduction to DNA Molecular Methods**

**Instructor:** Felicia Joseph  
**E-mail:** [fjoseph@lakeheadu.ca](mailto:fjoseph@lakeheadu.ca)  
**GA:** Nancy Cummings (ncumming@lakeheadu.ca)  
**Time & Place:** Lecture/Laboratory Thursdays 9:30 pm – 1:30 pm CB3012  
**Marks & Grading:** Lab Reports- 50% (5 laboratory write ups worth 10% each)  
Midterm Exam- 15%  
Final Exam- 20%  
Assignment- 15%

**Schedule:**

<b>September 6:</b>	Lecture 1	Basic Techniques
<b>September 13:</b>	Lecture 2 Laboratory 1	The Nature of DNA Laboratory Safety/ Basic Lab Techniques
<b>September 20:</b>	Lecture 3 Laboratory 2	Extraction Chemistry and Techniques The Nature of DNA
<b>September 27:</b>	Lecture 4 Laboratory 3	Purification Chemistry Extraction Methodologies
<b>October 4:</b>	Lecture 5 Laboratory 3	Polymerase Chain Reaction Extraction Methodologies
<b>October 11:</b>	Mid-Semester Study Break	
<b>October 18:</b>	Midterm	
<b>October 25:</b>	Lecture 6 Laboratory 4	Electrophoresis PCR Amplification
<b>November 1:</b>	Lecture 7 Laboratory 4	DNA Detection and Quantification PCR Amplification
<b>November 8:</b>	Lecture 8 Laboratory 5	DNA Sequencing DNA Sequence Analysis
<b>November 15:</b>	Lecture 9 Laboratory 5	DNA Data Analysis DNA Sequence Analysis
<b>November 22:</b>	Lecture 10 Laboratory 5	Various Other Techniques and Exam Review Sequencing Alignment
<b>November 29:</b>	Final Exam Final Lab and Assignment Due	