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<th>April 27</th>
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<tr>
<td>INTRODUCTION</td>
<td>DNA EXTRACTION</td>
<td>PCR</td>
<td>RNA EXTRACTION</td>
<td>RT-PCR/LONG PCR</td>
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<td>AM (Classroom)</td>
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<td>Course Syllabus Research Project Introductions</td>
<td>Lec: DNA extraction Lab: Begin DNA extraction Pour agarose gels PM (Lab) Finish DNA extraction Gel electrophoresis Spectrophotometry</td>
<td>Lec: PCR methods Lab: Set up PCR reactions Pour agarose gels PM (Lab) Gel electrophoresis PCR purification</td>
<td>Lec: Nucleic acids Lab: RNA extraction Pour agarose gels PM (Lab) Gel Electrophoresis Spectrophotometry</td>
<td>Lec: PCR applications Lab: Set up RT-PCR Pour agarose gels PM (Lab) Gel Electrophoresis Set up long PCR</td>
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<td>Orientation and safety Pipetting skills Practice calculations</td>
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**April 27**

**DNA EXTRACTION**

AM (Classroom)

**AM (Classroom)**

Course Syllabus Research Project Introductions

PM (Lab)

Orientation and safety Pipetting skills Practice calculations

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<thead>
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<td>PCR</td>
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**April 29**

**RNA EXTRACTION**

AM (Classroom)

**AM (Classroom)**

Course Syllabus Research Project Introductions

PM (Lab)

Orientation and safety Pipetting skills Practice calculations

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<td>RT-PCR/LONG PCR</td>
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<td>Lec: Recombinant DNA Lab: dA tailing Set up ligations PM (Lab) Transformation and Plating</td>
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<td>Lec: Enzymes in molecular biology Lab: Select and PCR colonies Pour agarose gels PM (Lab) Gel electrophoresis PCR purification</td>
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<td>Sanger sequencing PM (Lab) Set up sequencing reactions Data entry into template</td>
<td>Lec: Now-gen sequencing technologies Lab: Pour agarose gels PM (Lab) Gel electrophoresis of long PCR products Operation of sequencer</td>
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<td>Bioinformatics Lecture (Dr. Wareham from CS) PM (Classroom) Test Gattaca screening</td>
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