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|  | **Lecturer** | **Date** | **Friday Tutorial** | **Lecture Topic** |  |
| 1.1 | Hirst | 9-Sep | UNIX account | Course Introduction |  |
| 2.1 | Hirst | 14-Sep |  | Unix and Shell Scripting |  |
| 3.1 | Hirst | 16-Sep | Shell Scripts | DNA Sequencing I |  |
| 3.2 | Hirst | 21-Sep |  | DNA Sequencing II |  |
| 3.3 | Hirst | 23-Sep | FASTQC/BWA | Sequence Alignment I |  |
| 3.4 | Hirst | 28-Sep |  | Sequence Alignment II |  |
| - | Hirst | 30-Sep | SAMTOOLS | **STAT – NO CLASS** |  |
| 4.1 | Hirst | 5-Oct |  | Working with SAM/BAM files |  |
| 5.1 | Hirst | 7-Oct | MACS2 | Sequencing Applications: Introduction |  |
| 5.2 | Hirst | 12-Oct |  | Sequencing Applications: ChIP-seq I |  |
| 6.1 | Hirst | 14-Oct | STAR | Sequencing Applications: RNA-seq I |  |
| 6.2 | Hirst | 19-Oct |  | Sequencing Applications: RNA-seq II |  |
| - | Hirst | 21-Oct | HTSeq | **MIDTERM** |  |
| 7.1 | Koenig | 26-Oct |  | Introduction to R and RStudio |  |
| 7.2 | Koenig | 28-Oct | DESeq2 | Differential analysis with DEseq2 |  |
| 7.3 | Koenig | 2-Nov |  | R tidyverse: Wrangling data I |  |
| 7.4 | Koenig | 4-Nov | ‘R’ | R tidyverse: Wrangling data II |  |
| 7.5 | Koenig | 9-Nov |  | R tidyverse: Visualizing data |  |
| - |  | 11-Nov | ‘R’ | **STAT – NO CLASS** |  |
| 7.6 | Koenig | 16-Nov |  | R Markdown: Reproducibility in R |  |
| 8.1 | Hirst/Hauduc | 18-Nov | Project | Team Work |  |
| 8.2 | Hirst/Hauduc | 23-Nov |  | Team Work |  |
| 8.3 | Hirst/Hauduc | 25-Nov | Project | Team Work |  |
| 8.4 | Hirst | 30-Nov |  | Team Presentations |  |
| 8.5 | Hirst | 2-Dec |  | Team Presentations |  |
| 9.1 | Hirst | 7-Dec |  | **Review** |  |