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| **Week** | **Date** | **Topic/ActivityAssignmment** |
| 1 | W Jan 11 | Introduction to Course and the In Silico Portion of the HHMI Science Education Alliance mycobacteriophage research project |
|  | F Jan 13 | * DNA Master Software Installation and Introduction * Genome Assignment * DNAMaster preferences, importing genome and auto-annotation with Blast of all genes * Note resources: DNA Master Annotation guide |
| 2 | W Jan 18 | Introduction to Genes and Genomes;  Beginning Genome Annotation & Documentation |
|  | F Jan 20 | Group Research Project time---Genome Annotation |
| 3 | W Jan 25 | Group Research Project time---Genome Annotation |
|  | F Jan 27 | **Group Present draft gene for discussion from assigned genome section** |
| 4 | W Feb 1 | Group Research Project time---Genome Annotation |
|  | F Feb 3 | Group Research Project time---Genome Annotation |
| 5 | W Feb 8 | **Group GeneMark Map---due**  **Group Phamerator Map—due**  **Group presentation draft gene—due (presented in class, F Jan 27)** |
|  | F Feb 10 | **CATME 1 group review---due**  **Reflection 1---due**  **Group Rough draft Abstract for the Undergraduate Research symposium ----due** |
| 6 | W Feb 15 | **Groups present draft annotation ---Group presentation due**  Groups begin Functional annotation |
|  | F Feb 17 | Groups present draft annotation (continued)  Group Functional Annotation (continued) |
| 7 | W Feb 22 | **Group DNA Master file submitted for review----due**  Group Functional Annotation (continued) |
|  | F Feb 24 | Group Functional Annotation (continued)  **CATME 2 group review---due** |
| 8 | W Mar 1 | Purdue Genomics Core Facility----Presentation by Phillip San Miguel, Director Agricultural Genomics Center  ***Optional* presentation for HHMI symposium consideration---Post link in Blackboard discussion for view by peers and instructors---due**  **Reflection 2----due** |
|  | F Mar 3 | **Registration deadline for the undergraduate research symposium---Group research abstract due**  Group prepare poster presentation and consider research questions |
| 9 | W Mar 8 | Group prepare poster presentation and consider research questions (continued) |
|  | F Mar 10 | **Reflection 3---due**  Group prepare poster presentation and consider research questions (continued) |
| 10 | **Mar 13—17** | Deadline to submit candidates to HHMI phage symposium (March 17) |
| 11 | W Mar 22 | Introduction to PECAAN and quality check of genome |
|  | F Mar 24 |  |
| 12 | W Mar 29 | **Group presentation of poster for undergraduate research symposium---Group draft poster due** |
|  | F Mar 31 | Group presentation of poster for undergraduate research symposium (continued)  **CATME 3 group review---due**  **Reflection 4---due** |
| 13 | W Apr 5 | **Print poster for undergraduate research symposium---Group final poster due** |
|  | F Apr 7 |  |
| 14 | T Apr 11 (***no class on W Apr 12***) | **Tuesday, April 11, 2017; Groups attend the Purdue Undergraduate Research and Poster Symposium (**[**http://www.purdue.edu/research/Ugrad/showcase.php**](http://www.purdue.edu/research/Ugrad/showcase.php) **)** |
|  | F Apr 14 | Special Topics Research----Optional Genome selection with PECAAN |
| 15 | W Apr 19 | Reflect on feedback from research symposium and work on final genome files and final individual research paper |
|  | F Apr 21 | **CATME 4 group review---due**  **Reflection 5---due** |
| 16 | W Apr 26 | **Group Present Genome Annotation with Function and highlight unique findings and future research opportunities----Group presentation due** |
|  | F Apr 28 | Group Present Genome Annotation with Function (continued)  **Final Draft Genome Annotation in DNAMaster---due**  **Final Draft Genome Annotation in PECAAN---due** |
| **Finals Week** | **Wed. May 3** | **Final Research Paper--due**  **Final CATME group review---due**  **Final Reflection---due** |