2019 Dr. Douglas Morris

## **BIOLOGY 3671 - EVOLUTIONARY CONCEPTS - TUTORIAL GUIDE**

## **Topic 4: FUNCTION I**

Failure of the Breeder's Equation
Cooke's Equation
Unidirectional Adaptation
Fitness-mapping Functions
Fitness sets
The Adaptive Function
Fine vs Coarse Grain
Specialists, Generalists, and Polymorphisms
Possible Adaptive Strategies
Optimum Reaction Norms

## Tutorial 4: Verify the theme and confirm your understanding.

Write an outline of the theme and knowledge attained thus far and a lay summary.

At the end of the tutorial, select one of the following terms describing your self-assessment on this task (exceptional, outstanding, very strong, strong, moderate, insufficient). Do the same for your study group as a whole. Submit the group outline and lay summary plus both 'scores' with a brief justification to your GA before leaving. During the tutorial, answer the following questions:

Have we scaled the project so that we can handle it (rewrite the question if necessary)?

Are we on time (if not, revise the timeline and question if necessary)?

What do we know (modify the list)?

What more do we need to know (modify the list)?

What holes remain to be filled (make a list and a plan to fill them)?

Who does what when (modify the list)?

Required Reading: Morris and Lundberg 2011: Chapter 3: 53-71.