

Example Introduction Outline

“Using high performance liquid chromatography to monitor the destruction of Valinomycin by photocatalysis”

Relatively Poor Outline

- A. Toxic chemical danger
 - 1. terrorist attacks
 - 2. Valinomycin
- B. Valionmycin characteristics
 - 1. Antibacterial
 - 2. Apoptosis from higher concentrations
- C. Thin film photocatalysis
 - 1. Destruction of toxins
 - 2. Need to document affect on Valionmycin
- D. High Performance Liquid Chromatography
 - 1. Can identify presence of Valionmycin

Relatively Strong Outline

(suggested additions in italics)

- A. Toxic chemical danger (Larger Context)
 - 1. terrorist attacks (Conner 2002)
 - 2. *Water quality and toxin removal (citation)*
 - 2. Valinomycin (Barreto 2009)
- B. Valionmycin characteristics (Literature Review)
 - 1. Antibacterial (Park et al. 2008)
 - 2. Apoptosis from higher concentrations (Paananen et al. 2000)
 - 3. May destroy membrane potential of neural and cardiac cells
(Paananen et al. 2000)
 - 4. Potassium transport (Paananen et al. 2000)
 - 5. Potential as a biological weapon (Paananen et al. 2000, *and other citation if possible*)
- C. Thin film photocatalysis (Literature Review and the Next Step in the Research)
 - 1. Destruction of toxins (Suanda et al. 1998)
 - 2. Destruction of E. coli (Suanda et al. 1998)
 - 3. Mechanism – strong oxidation (Suanda et al. 1998, *and other citation if possible*)
 - 4. Need to document affect on Valionmycin (citation)
- D. High Performance Liquid Chromatography (Literature Review and the Next Step in the Research)
 - 1. Can identify presence of Valionmycin (Barreto 2009)

Example Introduction Outline

“The relationship between forest composition and hydrology in an urbanized cypress slough preserve”

Relatively Poor Outline

- A. Wetland loss
 - 1. loss in Six Mile
 - 2. urban context
 - 3. altered hydrology
- B. Vegetation as an indicator of change
- C. Cypress response to altered hydrology
 - 1. hydroperiod and cypress
 - 2. sustainable management of cypress

Relatively Strong Outline

(suggested additions in italics)

- A. Wetland loss (Larger Context)
 - 1. *Global, national, or regional context (citation)*
 - a. *direct loss*
 - b. *indirect loss, fragmentation and altered hydrology*
 - 2. Local losses – Six Mile Cypress Slough Preserve 41% (Key et al. 2009)
 - a. urbanizing landscape (Key et al. 2009)
 - b. habitat fragmentation (*citation*)
 - c. altered hydrology (*citation*)
- B. Ecosystem response (Review of Literature)
 - 1. *Ways to monitor ecosystem changes (citations)*
 - 2. Vegetation as a viable indicator (*citation*)
 - 3. *Ways to monitor vegetation change (citations)*
- C. Cypress as the indicator for wetland change (New Research)
 - 1. Dominant species (*citation*)
 - 2. Altered hydrology and hardwood invasion (*citation*)
 - 3. Hydroperiod and sustaining cypress (Figure, Wharton et al.; 1977)