**CHEM 344 Extraction Flowchart**

- **Mixture**
  - Extract with 5% NaOH
  - Organic Phase
    - Base (RNH₂)
    - Neutral (N)
    - Extract with 10% HCl
    - Evap. Org. Phase
      - Crude Neutral
        - Recrystallize
        - Pure Neutral
        - Recrystallize
  - Aqueous Phase
    - Conjugate base of acid
      - RCO₂⁻Na⁺
      - Acidify (10% HCl)
      - Crude ppt. of acid
        - Recrystallize
        - Pure Acid RCO₂H
    - Conjugate acid of base (RNH₃⁺Cl⁻)
      - Add base (5% NaOH)
      - Crude ppt. of amine
        - Recrystallize
        - Pure Amine RNH₂

- Acid
- Base
- Neutral