



Department of Civil Engineering 2014 Summer Semester Yoshimura Chihiro

Aquatic Environmental Science Outline #06: Redox Potential

1. Dissolved Oxygen

- Oxygen availability
- Solubility of oxygen
- Saturation of dissolved oxygen

2. Oxidation and Reduction

- Definition of oxidation and reduction
- Oxidant and reductant
- Redox potential (ORP, E_h)
- pE-pH diagram
- Chemical equilibrium model
- Major biological processes in water
- Aerobic and anaerobic digestion

3. Exercise