

# UE Aqueous solutions in biology - CHI430 -



- > **Langue(s) d'enseignement:** Anglais
- > **Ouvert aux étudiants en échange:** Non

## Présentation

### Description

This course deals with the properties of water as a solvent in relation to biology. It deals in particular with the notion of pH and associated calculations, solubility and redox reactions. The notions seen in the course are deepened in TD by application exercises and in TP by potentiometric titration experiments.

### Heures d'enseignement

Nouvelles heures d'enseignement	CM	7,5h
Nouvelles heures d'enseignement	TD	15h
Nouvelles heures d'enseignement	TP	6h

### Pré-requis recommandés

Definition of a chemical reaction, the equilibrium constant, calculation of pH, predominance diagram and oxidation reduction (see CHI131, CHI233, CHI335)

### Compétences visées

- Predict the composition (species concentration) of an aqueous solution as a function of its pH, solubility and potential.
- Calculate the concentration of species as a function of the solubility of the components
- Calculate the pH of a solution composed of a mixture of acid and base
- Know Nernst's law
- Know how to calculate the potential of a battery

## Infos pratiques

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### Contacts

Responsable pédagogique

Yohann MOREAU

✉ [yohann.moreau@cea.fr](mailto:yohann.moreau@cea.fr)

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### Campus

› Grenoble - Domaine universitaire