

Faculté des sciences

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## Biogéochimie environnementale (3BL2163)

Filières concernées	Nombre d'heures		Crédits ECTS
Master en biogéosciences	Cours: 4 dj TP: 4 dj	cont. continu	2

ph=période hebdomadaire, pg=période globale, j=jour, dj=demi-jour, h=heure, min=minute

## Période d'enseignement:

Semestre Printemps

## **Objectifs:**

- To understand interfacial processes and the application of empirical and thermodynamic-based models to describe sorption processes
- To gain a molecular-scale perspective of chemical reactions occurring at water-mineral, water-microbe, and microbe-mineral interfaces
- To become familiar with microscopic and spectroscopic techniques used to characterize natural particles and detect surface species
- To gain experience with the critical reading of the scientific literature

## Contenu:

Reactions occurring at mineral and microbial surfaces govern the attenuation, release and cycling of the elements in aquatic and soil environments. This course draws on the fields of surface chemistry, mineralogy and environmental microbiology to develop an understanding of key (bio)geochemical reactions in natural environments, particularly those impacted by anthropogenic activities.