

# Chemistry 9504B: Protein Folding

# **Course Outline (Winter 2020/21)**

## Instructor:

Lars Konermann

### Lecture:

One 2h lecture per week, posted online on OWL.

### **Evaluation:**

Assignments (there will be several assignments throughout the term)	20 %
Written exam	40 %
Oral Presentation	40 %

### Literature:

There is no text for this course. References to relevant reviews and journal articles will be provided.

### **Course Description:**

This course provides an overview of the current understanding of protein folding. The focus will be on the behavior of proteins *in vitro*, but aspects of folding in a cellular environment will be discussed as well. Topics to be covered include: structure and stability of proteins from a thermodynamic perspective, protein (un)folding under equilibrium conditions and in kinetic experiments, folding transition states and intermediates, misfolding and aggregation, folding funnels and folding models, and soluble vs. membrane proteins. The course will also address the area of conformational dynamics. Towards the end of the course each student will present a seminar talk on a folding-related topic from the recent literature.

### A few mandatory disclaimers ...

#### **Accessibility Statement**

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation.

#### **Prerequisites and Antirequisites**

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you will be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites. For details specific to this course, please consult the current Western Academic Calendar.

#### Students who are in emotional/mental distress

should refer to Mental Health@Western http://www.uwo.ca/uwocom/mentalhealth/ for a complete list of options about how to obtain help.