BIOCHEMISTRY 408 Chromatin & Epigenetics
Course Outline: **Spring 2019**

Place: **Elliot 162**
Time: Tuesday, Wednesday, Friday: 8:30 am - 9:20 am
Textbook: None
Web site: CourseSpaces

Instructors: **Dr. Juan Ausió (Jan 8,9; Feb 26 - April 5)**
Email: jausio@uvic.ca
Office: Petch 260
Office hours: 9:00am-5:00pm *

Dr. Chris Nelson (Jan 11-Feb 15; Mar 26-April 5)
Email: cjn@uvic.ca
Office: Petch 192
Office hours: W 1:00-3:00pm * (or by appointment)

* No office hours will be offered the day before, or day of, an exam.

Course Description
BIOC 408 introduces students to the properties of chromatin and molecular mechanisms underlying epigenetic inheritance. The course is heavily focused on primary research papers that utilize a diversity of model organisms to demonstrate the contributions of epigenetics to development and disease. The course requires a familiarization with nucleic acid and protein chemistry; therefore, students should be familiar with the fundamental aspects of transcription and gene structure. Students should also review basic cell biology in preparation for this course. Students must complete BIOC 300B before taking BIOC 408.

Format
The course consists of formal lectures that introduce essential background material, and key concepts in Chromatin and Epigenetics. There is a strong emphasis on the understanding of experimental methods and their application to test hypotheses. Each lecture will conform approximately to the attached course outline, however some changes are possible. Students are responsible for the lecture material and *Companion papers* in examinations.

Companion papers are assigned to the class to compliment the lecture material. These papers will be the subject of discussion and Group Assignments (see course outline). Each paper will be accompanied with a set of assignment questions that encourage students to fully understand the data, and the utility of experimental methods. A portion of the questions will be marked and make up the Discussion Group Assignment Grade.

Group presentations will take place at the end of the course (Mar 26-April 5). These presentations should be considered mini-lectures. The objective is for members of the group to extend the content of the course by summarizing a recent advance, new topic or paradigm shift in Chromatin and Epigenetics. It is expected that material from 1-3 research papers will be the basis of the lecture. Group composition and presentation guidelines will be announced in class. Each group will post

possible exam questions with their presentation. These questions may appear on the Final Exam, but will not be worth more

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Only students who have completed i) the Mid-term Exam, ii) a Group Presentation, and iii) the Final Exam, will be considered to have completed the course and will be assigned a final grade.

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DEPARTMENT INFORMATION AND POLICIES

1. academic integrity. These policies are described in the current University Calendar. All students are advised to read this section.

2. Cell phones, computers, and other electronic devices must be turned off at all times unless being used for a purpose relevant to the class. Students having a cell phone, tablet, or computer on their person during an exam will be assumed to have it for the purpose of cheating.

3. **Any recordings of lectures may only be performed with written permission of the instructor, and are for personal use only. The instructor retains copyright to such recordings and all lecture materials provided for the class (electronic and otherwise); these materials must not be shared or reposted on the Internet.**

4. **Course materials, such as notes, problem sheets, quizzes, examinations, example sheets, or review sheets, may not be redistributed without the explicit written permission of the instructor.**

5. Students are expected to be present for the midterm and final exams. Instructors may grant deferrals for midterm examinations for illness, accident, or family affliction, and students must provide appropriate documentation 48 hours after the midterm exam. The Department of Biochemistry and Microbiology considers it a breach of academic integrity for a student taking a deferred examination to discuss the exam with classmates. Similarly, students who reveal the contents of an examination to students taking a deferred examination are considered to be in violation of the University of Victoria policy on academic integrity (see current University Calendar). Deferral of a final exam must be requested with an Academic Concession form and submitted directly to Undergraduate Records. Deferred final exams for fall term courses will be arranged by the instructor. Deferred final exams for spring term courses will be arranged through Undergraduate Records and must be written before the end of the summer term as stipulated in the University Calendar.

6. Multiple choice scan sheets for machine scoring (bubble sheets) are considered the authentic exam answer paper and will be retained by the department for 1 year.

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