

UNIVERSITY OF CALGARY  
DEPARTMENT OF CHEMISTRY  
**COURSE SYLLABUS**  
WINTER 2020

**1. COURSE: Chemistry 701.31, Analytical Flame Photometry**

LEC	DAYS	TIME	ROOM	INSTRUCTOR	OFFICE	PHONE	EMAIL	OFFICE HOURS
L01	TuTh	11:00-12:15	SB 219	Dr. Thurbide	SB 219	220-5370	<a href="mailto:thurbide@ucalgary.ca">thurbide@ucalgary.ca</a>	TuTh12:30-1:30

To avoid IT problems, students must use their U of C account for all course correspondence. Please use "CHEM 701 inquiry" as the subject of your e-mail.

Departmental Office: Room SA 229, Tel: (403) 220-5341, e-mail: [uginfo@chem.ucalgary.ca](mailto:uginfo@chem.ucalgary.ca)

**2. Course Description:**

The basic principles of flames, their properties, and how they can benefit analytical sciences, particularly detection, is covered. Photometric measurements and detector construction are presented in detail along with pertinent instrumental / troubleshooting aspects. A comparison of unconventional combustion devices is drawn to apply these principles. Students emerge with a broad appreciation of these flames and their analytical properties..

**3. Recommended Textbook:**

There is no formal textbook for this course.

**4. Topics Covered**

1. Flame structure
2. Flame propagation
3. Flame energetics
4. Flames in Detectors
5. Signal processing

**The following signature lines should be added to the course outline as appropriate**

Department Approval \_\_\_\_\_ Electronically Approved \_\_\_\_\_ Date \_\_\_\_\_ January 6, 2020 \_\_\_\_\_