

2. Advanced Course.—Mineralogy and Crystallography.  
 Geology and Palæontology.  
 Mathematics of Crystallography.  
 Physical Geography.  
 Geology and Palæontology of Canada.

*Text Books and Books of Reference.*—Dana's System of Mineralogy.  
 Chapman's Geology of Canada.  
 Nicholson's Palæontology.  
 Chapman's Synopsis.

#### PRACTICAL COURSES.

1. Use of Blowpipe—Chapman's Blowpipe Practice.
2. Blowpipe Analysis, Determinative Mineralogy. Economic Minerals of Canada.  
 Kerl's Leitfaden bei qual. u. quant. Lothrohr-Untersuchungen, etc.  
 Aufl. 2. Plattner's Blowpipe Treatise. Von Kobell's Tafeln. Chapman's Mineral Tables.
3. Assaying.—Mitchell's Assaying, by Crooks.  
 Kerl's Probirkunst.  
 Chapman's Assay Notes, 2nd edition.
4. Mining Geology.—*Books of Reference*—Burat's Géologie Appliquée and Cours d'Exploitation des Mines. Niederist's Bergbaukunde. Von Cotta's Erzlagerstätten.

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#### IV. BIOLOGY.

Those students of the School of Practical Science who are required to take Biology as part of their course join the Arts Classes of the University of Toronto, which will be conducted henceforward in the New Building of the University Biological Department.

The following is the University Course in Biology for Art Students. That for Medical Students will be found in the Calendar of the Medical Faculty.

The following arrangements will be in force during the year 1889-90 :

1. A course of Elementary Lectures on Biology will be given on Tuesdays and Thursdays at 12 noon to prepare Candidates for the University Examination of the First Year.