Checksheet - Required Courses for Chemistry Majors

**CHEMISTRY**
- Chem 1061/5 (4) Chemical Principles I
- Chem 1062/6 (4) Chemical Principles II
- Chem 2301 (3) Organic Chem I
- Chem 2302 (3) Organic Chem II
- Chem 2311 (4) Organic Lab
- Chem 2101 (3) Intro Analytical Chem Lecture
- Chem 2111 (2) Intro Analytical Chem Lab
- Chem 4501 (3) Thermo, Stat Mech, Kinetics
- Chem 4502 (3) Quantum Mech, Spectroscopy
- Chem 4701 (3) Inorganic Chemistry

**Math**
- Math 1271 (4) or 1371 (4) Calculus I
- Math 1272 (4) or 1372 (4) Calculus II
- Math 2263 (4) or 2374 (4) Multivariable Calculus
- Math/Phys elective (4) CSE Only
  (Math 2243 or 2373, Phys 2303 or 2503, or Stat 3021)

**Physics**
- Phys 1301W (4) or 1201W (5) Intro Physics I
- Phys 1302W (4) or 1202W (5) Intro Physics II

**Writing Practice**
- First-year Writing Requirement (e.g., Writ 1301 or 1401)
- 4 Writing Intensive Requirements (incl. 2 at ≥3xxx level)

**Advanced Technical Electives**
- CSE cr., CLA 3 cr. — upper level technical courses (>3 cr.)

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**Liberal Education**

onestop.umn.edu/academics/education-requirements

**Diversified Core** (7 courses*)
- One course of ≥3 credits in each of the following 5 areas:
  - Arts/Humanities
  - Mathematical Thinking
  - Historical Perspective
  - Social Sciences
  - Literature

**One course of ≥4 credits, with a laboratory or field experience, in both of the following:**
- Physical Science
- Biological Science

**Designated Themes** (4 courses*)
- One course of ≥3 credits in 4 of the following 5 areas:
  - Civic Life and Ethics
  - Diversity & Social Justice in the US
  - The Environment
  - Global Perspectives
  - Technology & Society

* Some courses are certified for both a Core and a Theme: onestop.umn.edu/search-education-requirements