College of Science  
Department of Chemistry  
Minor: Materials in Society  
For students graduating in calendar year 2021

**Instructions:** Complete all classes in Section I (Core Requirements), three classes from Section II (Restricted Electives), and Section III (Materials in Society Capstone Requirement). 18 total credit hours are required to complete the minor.

**I. Core Requirements (6 credits):**

- **MSE 1014**  
  The Science of Materials in Everyday Life  
  **Core outcome:** Reasoning in the Natural Sciences  
  **Integrative outcome:** Ethical Reasoning

- **CHEM 3054**  
  Postconsumer Materials  
  **Core outcome:** Reasoning in the Natural Sciences  
  **Integrative outcome:** Intercultural and Global Awareness

**II. Restricted Electives (9 credits):** Of the 9 credits, 3 must come from Section IIa (Social Equity), 3 must come from Section IIb (Policy), and 3 must come from Section IIc (Materials Science).

**IIa: Social Equity (3 credits):** Choose 1 of the course options.

- **PHIL 1304**  
  Morality and Justice  
  **Core outcome:** Critical Thinking in the Humanities  
  **Integrative outcome:** Ethical Reasoning

- **STS 2454**  
  Science Technology and the Environment  
  **Core outcome:** Critical Thinking in the Humanities  
  **Integrative outcomes:** Intercultural and Global Awareness; Ethical Reasoning

- **STS 3334**  
  Energy and Society  
  **Core outcome:** Critical Thinking in the Humanities or Reasoning in the Social Sciences  
  **Integrative outcome:** Intercultural and Global Awareness

**IIb: Policy (3 credits):** Choose 1 of the course options.

- **STS 2444**  
  Global Science and Technology Policy  
  **Core outcome:** Critical Thinking in the Humanities or Reasoning in the Social Sciences  
  **Integrative outcome:** Intercultural and Global Awareness

- **SPIA 2554**  
  Collaborative Policy Making and Planning  
  **Core outcome:** Reasoning in the Social Sciences or Critical Analysis of Equity and Identity in the United States  
  **Integrative outcome:** Ethical Reasoning

- **SPIA 4464**  
  Data and the Art of Policy Making and Planning  
  **Core outcome:** Advanced/Applied Quantitative and Computational Thinking  
  **Integrative outcome:** Ethical Reasoning

**IIc: Materials Science (3 credits):** Choose 1 of the course options.

- **MINE 2114**  
  Energy and Raw Materials: Geopolitics and Sustainable Development  
  **Core outcome:** Reasoning in the Natural Sciences  
  **Integrative outcome:** Intercultural and Global Awareness

- **CHEM 1015 or 1016**  
  Chemistry in Context  
  **Core outcome:** Reasoning in the Natural Sciences  
  **Integrative outcome:** Ethical Reasoning

- **GEOS 1024**  
  Earth Resources, Society, and the Environment  
  **Core outcome:** Reasoning in the Natural Sciences

Rev. 8/3/2018
III. Materials and Society Capstone Requirement (3 credits):
CHEM 4054 Capstone in Materials and Society (Pre: 3054, MSE 1014) (3)___

Prerequisites
Some courses listed on this checksheet may have prerequisites. Students are required to double check course prerequisites and equivalents. Please see your advisor or consult the Undergraduate Course Catalog for more information.

Minimum GPA
For the courses attempted for this minor, the student must have a GPA of 2.0 or better.

Substitutions
a Prior credit in CHEM 1035 or CHEM 1036 can substitute for CHEM 1015 or CHEM 1016.