

College of Science
Department of Chemistry
Minor: Materials in Society
For student date of entry under UG catalog 2021-2022

Instructions: Complete all classes in Section I (Core Requirements), three classes from Section II (Restricted Electives), and Section III (Materials and Society Capstone Requirement). 18 total credit hours are required to complete the minor. no more than 50% of the graded course credits required for the minor may be double-counted in a student's major.

I. Core Requirements (6 credits):

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| MSE 1014 | The Science of Materials in Everyday Life
<i>Core outcome: Reasoning in the Natural Sciences (No. 4)</i>
<i>Integrative outcome: Ethical Reasoning</i> | (3)____ |
| CHEM 3054 | Postconsumer Materials
<i>Core outcome: Reasoning in the Natural Sciences (No. 4)</i>
<i>Integrative outcome: Intercultural and Global Awareness</i> | (3)____ |

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.

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| PHIL 1304 | Morality and Justice
<i>Core outcome: Critical Thinking in the Humanities (No. 2)</i>
<i>Integrative outcome: Ethical Reasoning</i> | (3)____ |
| STS 2454 | Science Technology and the Environment
<i>Core outcome: Critical Thinking in the Humanities (No. 2)</i>
<i>Integrative outcomes: Intercultural and Global Awareness; Ethical Reasoning</i> | (3)____ |
| STS 3334 | Energy and Society
<i>Core outcome: Critical Thinking in the Humanities (No. 2)</i>
<i>or Reasoning in the Social Sciences (No. 3)</i>
<i>Integrative outcome: Intercultural and Global Awareness</i> | (3)____ |
| STS 3284 | Technology and Disability
<i>Core outcome: Critical Thinking in the Humanities (No. 2)</i>
<i>or Critique and Practice in Design and the Arts (Design) (No. 6d)</i>
<i>Integrative outcome: Ethical Reasoning</i> | (3)____ |
| ENGL 2634 | Writing and Social Justice (<i>Prerequisite: ENGL 1106 or ENGL 1204H or COMM 1016</i>)
<i>Core outcomes: Advanced or Applied Discourse (No. 1a)</i>
<i>and Critical Analysis of Identity and Equity in the United States (No. 7)</i>
<i>Integrative outcome: Ethical Reasoning</i> | (3)____ |

(checksheets continues on next page)

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

STS 2444	Global Science and Technology Policy <i>Core outcome: Critical Thinking in the Humanities (No. 2) or Reasoning in the Social Sciences (No. 3)</i> <i>Integrative outcome: Intercultural and Global Awareness</i>	(3)____
SPIA 2554	Collaborative Policy Making and Planning <i>Core outcome: Reasoning in the Social Sciences (No. 3) and Critical Analysis of Equity and Identity in the United States (No. 7)</i> <i>Integrative outcome: Ethical Reasoning</i>	(3)____
SPIA 4464	Data and the Art of Policy Making and Planning <i>Core outcome: Advanced/Applied Quantitative and Computational Thinking (No. 5a)</i> <i>Integrative outcome: Ethical Reasoning</i>	(3)____
FREC 4174 (IS 4174) (PSCI 4174)	Climate Change and International Policy (<i>Prerequisite: FREC 2124 or GEOS 1524</i>) <i>Core outcome: Advanced/Applied Discourse (No. 1a) or Reasoning in the Social Sci. (No. 3)</i> <i>Integrative outcome: Ethical Reasoning</i>	(3)____
FREC 4464 (AAEC 4464) (WATR 4464)	Water Resources Policy and Economics (<i>Prerequisite: AAEC 1005 or ECON 2005</i>) <i>Core outcome: Reasoning in the Social Sciences (No. 3) and Critical Analysis of Identity and Equity in the United States (No. 7)</i> <i>Integrative outcome: Ethical Reasoning</i>	(3)____

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

MINE 2114	Energy and Raw Materials: Geopolitics and Sustainable Development <i>Core outcome: Reasoning in the Natural Sciences (No. 4)</i> <i>Integrative outcome: Intercultural and Global Awareness</i>	(3)____
CHEM 1015 ^a	Chemistry in Context <i>Core outcome: Reasoning in the Natural Sciences (No. 4)</i> <i>Integrative outcome: Ethical Reasoning</i>	(3)____
CHEM 1016 ^a	Chemistry in Context <i>Core outcome: Reasoning in the Natural Sciences (No. 4)</i> <i>Integrative outcome: Ethical Reasoning</i>	(3)____
GEOS 1024	Earth Resources, Society, and the Environment <i>Core outcome: Reasoning in the Natural Sciences (No. 4)</i> <i>Integrative outcome: Intercultural and Global Awareness</i>	(3)____
ENSC 1015	Foundations of Environmental Science <i>Core outcome: Reasoning in the Natural Sciences (No. 4)</i> <i>Integrative outcome: Intercultural and Global Awareness</i>	(3)____
ENSC 1016	Foundations of Environmental Science <i>Core outcome: Reasoning in the Natural Sciences (No. 4)</i> <i>Integrative outcome: Intercultural and Global Awareness</i>	(3)____
GEOS 1004	Introduction to Earth Science <i>Core outcome: Reasoning in the Natural Sciences (No. 4)</i> <i>Integrative outcome: Ethical Reasoning</i>	(3)____

III. Materials and Society Capstone Requirement (3 credits):

CHEM 4054	Capstone in Materials and Society (<i>Prerequisites: 3054 and MSE 1014</i>)	(3)____
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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.

For planning purposes, students may wish to be aware that the following courses are typically taught during:

Fall Semester: STS 2454, STS 3334, SPIA 2554, MINE 2114, CHEM 1015, FREC 4174, FREC 4464, ENSC 1015, GEOS 1014, and STS 3284.

Spring Semester: CHEM 1016, PHIL 1304, STS 2444, SPIA 4464, GEOS 1024, CHEM 3054, MSE 1014, CHEM 4054, ENSC 1016, ENGL 2564, and GEOS 1004.