CORE CURRICULUM – 43-44 Semester Hours (SH)

UNIVERSITY CORE

A. Core Foundations

<table>
<thead>
<tr>
<th>Course</th>
<th>SH</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE 101</td>
<td>3</td>
</tr>
<tr>
<td>CORE 102</td>
<td>3</td>
</tr>
<tr>
<td>HNRS 103*</td>
<td>3</td>
</tr>
<tr>
<td>CORE 201</td>
<td>3</td>
</tr>
<tr>
<td>CORE 202</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: Courses listed in multiple areas can only be used to fulfill a single area requirement.

Students can use only one course with their major prefix to fulfill core requirements.

* Honors course – will meet CORE 101 & 102 for those students in the RU honors program

B. Core Skills & Knowledge

Courses must be from different disciplines:

- **MATHEMATICAL SCIENCES (3 SH)**
  - MATH 151
- **NATURAL SCIENCES (4 SH)**
  - GEOL 100
- **HUMANITIES (3 SH)**
  - One of the following: CLSS 110, CCST 100, ENGL 200, HIST 101, 102, PHIL 111, 112, RELN 111, 112, 203, 205
- **VISUAL & PERFORMING ARTS (3 SH)**
  - One of the following: ART 100, 201, 215, 216, CVP 102, DNCE 111, MUSC 100, 101, 121, 123, THEA 100, 180
- **SOCIAL/BEHAV. SCIENCES (3 SH)**
  - One of the following: ANSC 101, APST 200, ECON 105, 106, GEOG 101, 102, 103, HIST 111, 112, POSC 120, 120, 121, PSYC 121, RELN 205, SOCY 110, 121

B. National & International Perspectives

Courses must be from different disciplines:

- **U. S. PERSPECTIVES (3 SH)**
  - One of the following: APST 200, ENGL 101, 105, 106, HIST 111, 112
- **GLOBAL PERSPECTIVES (3 SH)**
  - One of the following: ENGL 201, 202, CVP 266, GEOG 101, 102, 140, 280, HIST 101, 102, INST 101, ITEC 112, PEAC 200, RELN 112, 205, SOCY 121, THEA 180, WMST 101

B. Supporting Skills & Knowledge

- **SUPPORTING SKILLS & KNOWLEDGE**

<table>
<thead>
<tr>
<th>Course</th>
<th>SH</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 151</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 152</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 111</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 112</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 221</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 222</td>
<td>3</td>
</tr>
</tbody>
</table>

B.S. requirements: 8 hours of Physics courses

- **PHYS** 111 (4)
- **PHYS** 112 (4)
- **PHYS** 221 (4)

**Prerequisites**

- **Physics I**
  - F/S
  - Math SAT ≥ 550, or college pre-calculus "C" or equivalent

**Mathematics**

- **MATH 137 or equivalent**

**Engineering and Environmental Geosciences Concentration**

<table>
<thead>
<tr>
<th>Course</th>
<th>SH</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 100</td>
<td>4</td>
<td><strong>Geology</strong></td>
</tr>
<tr>
<td>GEOL 105</td>
<td>4</td>
<td><strong>Geology</strong></td>
</tr>
<tr>
<td>GEOL 106</td>
<td>4</td>
<td><strong>Geology</strong></td>
</tr>
<tr>
<td>GEOL 310</td>
<td>4</td>
<td>Mineralogy</td>
</tr>
<tr>
<td>GEOL 312</td>
<td>4</td>
<td>Igneous and Metamorphic Petrology</td>
</tr>
<tr>
<td>GEOL 440</td>
<td>4</td>
<td>Structural Geology</td>
</tr>
<tr>
<td>GEOL 441</td>
<td>4</td>
<td>Geologic Field Methods</td>
</tr>
</tbody>
</table>

**Additional courses required for the Engineering and Environmental Geosciences Concentration:**

- **GEOS** 250 (3)
  - Introduction to GIS
  - F/S
  - Basic knowledge of internet usage
- **GEOS** 315 (3)
  - Intermediate GIS Concepts
  - S
  - GEOL 250
- **GEOL 320 (4)**
  - Sedimentary Petrology and Stratigraphy
  - F
  - GEOL 310
- **GEOL 455 (4)**
  - Principles of Engineering
  - F
  - GEOL 105; & GEOL 100 or 106; MATH 140 or higher; 4 hrs PHYS recommended
- **GEOL 460 (4)**
  - Geophysics
  - F/S
  - S
  - GEOL 105 or ASTR 111; & PHYS 111-112 or PHYS 221-222 & MATH 252
- **GEOL 460 (3)**
  - Senior Seminar
  - F
  - Senior Standing
- **GEOL 474 (4)**
  - Hydrogeology
  - S
  - GEOL 105; & GEOL 100 or 106; MATH 140 or higher; 4 hrs PHYS recommended
- **CHEM 101 (4)**
  - General Chemistry
  - F/S
  - CHEM 101
- **CHEM 102 (4)**
  - General Chemistry
  - S/S
  - CHEM 101
- **MATH 151 (3)**
  - Calculus and Analytic Geometry I
  - F/S
  - Math SAT ≥ 550, or college pre-calculus "C" or ALEKS exam
- **MATH 152 (3)**
  - Calculus and Analytic Geometry II
  - F/S
  - MATH 151 "C" or better

**Additional courses required for the Physics Concentration:**

- **PHYS** 111 (4)
  - General Physics I
  - F/S
  - MATH 137 or equivalent
- **PHYS** 112 (4)
  - General Physics II
  - F/S
  - PHYS 111
- **PHYS** 221 (4)
  - Physics I
  - F
  - MATH 151
- **PHYS** 222 (4)
  - Physics II
  - S
  - PHYS 221