

**MEMORANDUM OF UNDERSTANDING**  
**CARROLL COMMUNITY COLLEGE & TOWSON UNIVERSITY**  
**April 15, 2019**

**GEOLOGY B.S. Degree**

Carroll Community College, Westminster, Maryland, and Towson University, agree to follow the articulation of courses outlined in the articulation (course equivalency) document, for completion of requirements for the Bachelor of Science degree in Geology (Attachment A), which is attached to, and incorporated by reference into, this Memorandum of Understanding (MOU). The following principles guide the operation of this MOU, with the requirements for transfer in specific curricula set forth in Attachment A.

1. Towson University will accept a maximum number of 64 credits from Carroll Community College as outlined in the Attachment A. The number of transferable credits specific to this program is reflected in Attachment A.
2. Students who have completed the Associate of Science Degree in Physical Sciences, Geology Concentration program at Carroll Community College may transfer into Towson University's Geology program with junior standing provided that the student has completed all courses identified on Attachment A (which is attached to, and incorporated by reference into, this MOU) with a cumulative GPA of 2.00 or higher. Courses completed at Carroll Community College with 300 or 400 level Towson University course equivalencies will transfer as lower-level credit but will satisfy course content as indicated.
3. Only courses in which a grade of C (2.00) or better is earned will apply toward the major at Towson University.
4. In accordance with the MHEC transfer policy pertaining to general education requirements, Towson University will accept the completion of Carroll Community College's general education requirements (GenEds) and students will be required to complete courses at Towson University to satisfy the remaining *University Core* requirements as shown in Attachment A.
5. Towson University recognizes college-level experiential learning gained through previous work, military and/or volunteer service or life experience. Credit for prior learning may also be established through course challenge or standardized credit by examination.
6. Carroll Community College students transferring to Towson University will be given every consideration for financial aid and will be eligible to compete for academic scholarships upon entrance to Towson University subject to stated scholarship deadlines.
7. Both Carroll Community College and Towson University agree to work together to facilitate the transfer of students from Carroll Community College to Towson University to work cooperatively to insure the high quality of the programs at the respective

institutions. Transfer of students will be in accordance with policies and procedures of both institutions, as they may be amended from time to time.

8. This MOU will be in effect initially for ten years, beginning *fall 2019*, with a review every two years by both parties. Any revisions the parties deem necessary must be evidenced in writing and signed by the authorized officials of each institution. The MOU may be terminated by either party for due cause and after adequate notice of not less than six months is given to the other party.
9. Towson University will establish procedures to provide information on the academic progress of Carroll Community College students enrolled as part of this MOU.
10. This MOU, when signed, constitutes the entire agreement between the parties and supersedes all prior agreements and understandings between the parties respecting the matter hereof.

CARROLL COMMUNITY COLLEGE AND TOWSON UNIVERSITY

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**Dr. Rosalie Mince**  
Vice President of  
**Academic and Student Affairs**

**Date** \_\_\_\_\_

\_\_\_\_\_  
**Dr. Melanie Perreault**  
Provost and Executive Vice-President  
for **Academic Affairs**

**Date** \_\_\_\_\_

**CARROLL COMMUNITY COLLEGE – PHYSICAL SCIENCES, GEOLOGY CONCENTRATION A.S. DEGREE**  
**TOWSON UNIVERSITY – GEOLOGY B.S. DEGREE**

CARROLL COMMUNITY COLLEGE			TOWSON UNIVERSITY		
COURSE #	COURSE TITLE	CRS.	TU EQUIVALENCY	COMMENTS	COURSE ID#
	<b>General Education Applied to CORE</b>				
				<i>Towson Seminar Waived</i>	<b>13192</b>
ENGL 101	COLLEGE WRITING	3	ENGL 102		<b>2348</b>
MATH 135	CALCULUS OF A SINGLE VARIABLE I	4	MATH 273	Satisfies required course for major at TU	<b>4407</b>
PHIL 105	ETHICS (ARHU general education elective)	3	PHIL 103	See Note under Carroll Course Selection (page 2)	<b>11712</b>
ARHU GENED	ARTS & HUMANITIES GENERAL EDUC	3	Depends on choice	See Note under Carroll Course Selection (page 2)	
SOC/BEH SCI	SOCIAL & BEHAVIORAL SCI GENERAL EDUC	3	Depends on choice	See Note under Carroll Course Selection (page 2)	
SOC/BEH SCI	SOCIAL & BEHAVIORAL SCI GENERAL EDUC	3	Depends on choice	See Note under Carroll Course Selection (page 2)	
CHEM 105	PRINCIPLES OF GENERAL CHEMISTRY I	4	CHEM 131/L	Satisfies required course for major at TU	<b>13097</b> <b>13098</b>
PHYS 101 OR PHYS 111	FUNDAMENTALS OF PHYSICS I or PHYSICS 1 FOR SCIENTISTS & ENGINEERS	4	PHYS 211 PHYS 241	Satisfies required course for major at TU Satisfies required course for major at TU	<b>6800</b> <b>6805</b>
ENGL 102	WRITING ABOUT LITERATURE	3	ENGL TLL		<b>10267</b>
GEO SC 121	PHYSICAL GEOLOGY	4	GEOL 121	Satisfies required course for major at TU	<b>3086</b>
GEO SC 123	HISTORICAL GEOLOGY	4	GEOL 123	Satisfies required course for major at TU	<b>3087</b>
	<b>Units Applied to TU Core</b>	<b>38</b>			
	<b>Program Requirements/Electives</b>				
CHEM106	PRINCIPLES OF GENERAL CHEMISTRY II	4	CHEM 132/L	Satisfies required course for major at TU	<b>13099</b> <b>13100</b>
PHYS 102 OR PHYS 212	FUNDAMENTALS OF PHYSICS II or PHYSICS 2 FOR SCIENTISTS & ENGINEERS	4	PHYS 212 PHYS 242	Satisfies required course for major at TU Satisfies required course for major at TU	<b>6801</b> <b>6806</b>
GEO SC 110*	PHYSICAL GEOGRAPHY	4	GEOG 101L	Satisfies elective course for major at TU	<b>12392</b>
GEO SC 201*	METEOROLOGY <i>(substituted for GEO SC 103 Environmental Sustainability)</i>	4	GEOG T77 (377)	Transfers as lower level credit Satisfies elective course for major at TU See Note under Carroll Course Selection (page 2)	<b>10318</b>
GEO SC 105*	INTRODUCTION TO OCEANOGRAPHY	4	GEOL T57 (357)	Transfers as lower level credit Satisfies elective course for major at TU	<b>11160</b>
PROG ELECT	PROGRAM ELECTIVE	3	Depends on choice		
	<b>Program Requirements Applied</b>	<b>23</b>		<b>CORE Transfer Package 4 AACR 400 (13065)</b>	
	<b>Total Units Completed at</b>	<b>61</b>			
	<b>Maximum Units in Transfer</b>	<b>64</b>			

\*Notes: GEO SC 110 (Physical Geography) satisfies major elective at TU for students under this agreement only.

GEO SC 105 (Introduction to Oceanography) transfers as GEOL 357 and satisfies a major elective at TU under this agreement only. This course transfers as lower level credit and will not be applied to TU's 32 upper level credit requirement.

GEO SC 201 (Meteorology) will be substituted for GEO SC 103 (Environmental Sustainability) for students under this agreement only. It transfers as GEOG 377 and satisfies a major elective at TU. This course transfers as lower level credit and will not be applied to TU's 32 upper level credit requirement.

**CARROLL COMMUNITY COLLEGE – PHYSICAL SCIENCES, GEOLOGY CONCENTRATION A.S. DEGREE**  
**TOWSON UNIVERSITY – GEOLOGY B.S. DEGREE**

**Carroll Community College Course Selection:**

**General Education:**

1. One General Education course must be a General Education Diversity designated course.
2. Students should choose PHIL 105 Ethics as one of their Arts and Humanities General Education courses at Carroll to satisfy a Core Requirement at TU. Students who do not complete PHIL 105 at Carroll may be required to take an additional Core course at TU.
3. Students should select courses that appeal to their personal or professional interests to satisfy the remaining Arts & Humanities and Social & Behavioral Science requirements. All courses that satisfy these general education categories at Carroll will transfer and be applied to TU's Core Curriculum. Courses for which TU does not offer a direct equivalent will be assigned a lower-level elective in the same discipline (e.g. COMM TLL).

**Requirements:**

Students transferring to TU will be allowed to substitute GEOSC 201 Meteorology for GEOSC 103 Environmental Sustainability at Carroll. Students should consult with their academic advisor to obtain permission. GEOSC 201 transfers as GEOG T77 (377) and satisfies an elective course in the major at TU. Note that the course transfers as lower level credit. Students who wish to take both GEOSC 201 and GEOSC 103 may do so. GEOSC 103 will transfer to TU as a lower-level environmental science elective (ENVS TLL).

GEOSC 110 (Physical Geography) satisfies a major elective at TU for students under this agreement only.

**Electives:**

Students should take GEOSC 105 (Introduction to Oceanography) as one of their program electives at Carroll. GEOSC 105 transfers as GEOL 357 (Physical Oceanography) and satisfies an elective course in the major for students under this agreement only. This course transfers as lower level credit.

Students may satisfy the additional elective with a course of their choosing.

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**DEGREE REQUIREMENTS TO BE COMPLETED AT TU: 59 UNITS**

**CORE CURRICULUM REQUIREMENTS: 3-6 UNITS**

CORE 9	Advanced Writing Seminar	3 units
CORE 14	Ethical Issues	(3 units)

*If PHIL 105 was not completed at Carroll*

**MAJOR REQUIREMENTS: 26-29 UNITS**

**REQUIRED GEOLOGY COURSES: 20 UNITS**

GEOL 305	ENVIRONMENTAL GEOLOGY	4 UNITS
GEOL 321	STRUCTURAL GEOLOGY	4 UNITS
GEOL 331	MINERALOGY	4 UNITS
GEOL 333	PETROLOGY OF IGNEOUS AND METAMORPHIC ROCKS	4 UNITS
GEOL 443	SEDIMENTOLOGY AND STRATIGRAPHY	4 UNITS

**PROGRAM ELECTIVES: 6-9 UNITS**

Two additional courses are required. Students must choose from a list of electives (see current TU catalog). Both courses must be Geology (GEOL) courses. Students who did not complete GEOSC 105 (Introduction to Oceanography) as a program elective at Carroll or who did not substitute GEOSC 201 (Meteorology) for GEOSC 201, will be required to take three additional courses of which two must be Geology (GEOL) courses.

**GENERAL ELECTIVES: 24-30 units**

Students may consider filling general elective units through a number of different options, including completing additional electives in the major, adding a minor, or completing electives to explore personal and professional interests.

**ADDITIONAL BACHELOR'S DEGREE REQUIREMENTS:**

- A C (2.0) or higher is required in all major courses and prerequisites
- A cumulative grade point average (GPA) of 2.0 is required
- 32 units of the bachelor's degree must be completed at the upper level (courses numbered 300 or above)

**TOTAL UNITS TO THE B.S. DEGREE: 120 UNITS**

CARROLL COMMUNITY COLLEGE ASSOCIATE OF SCIENCE DEGREE	61
COMPLETION OF TU CORE	3-6
TU GEOLOGY MAJOR REQUIREMENTS	26-29
GENERAL ELECTIVES AT TU	24-30