

**MINNESOTA STATE COLLEGES AND
UNIVERSITIES*
ARTICULATION AGREEMENT
BETWEEN**

**Rochester Community and Technical College
AND
University of Wisconsin River Falls**

*The Board of Trustees of the Minnesota State Colleges and Universities is authorized by Minnesota Statutes, Chapter 136F to enter into Agreements and has delegated this authority to colleges and universities.

This Agreement is entered into between **Rochester Community and Technical College** (hereinafter sending institution), and **University of Wisconsin River Falls** (hereinafter receiving institution). This Agreement and any amendments and supplements, shall be interpreted pursuant to the laws of the State of Minnesota.

The sending institution has established an Environmental Science Program A.S. (hereinafter sending program), and the receiving institution has established an Environmental Science Program B.S. (hereinafter receiving program), and will facilitate credit transfer and provide a smooth transition from one related program to another. It is mutually agreed:

Admission and Graduation Requirements

- A. The receiving institution's admission and program admission requirements apply to both direct entry students and to students who transfer under this agreement.
- B. Students must fulfill the graduation requirements at both institutions.
- C. Students must complete the entire sending program and meet the receiving institution's admission requirements for the agreement to apply.

Transfer of Credits

- A. The receiving institution will accept 60 credits from the sending program. A total of 59-74 credits remain to complete the receiving program.
- B. Courses will transfer as described in the attached Program Articulation Table. For system institutions, once the courses are encoded, they will transfer as described in the Transferology Audit.

Implementation and Review

- A. The Chief Academic Officers or designees of the parties to this agreement will implement the terms of this agreement, including identifying and incorporating any changes into subsequent agreements, assuring compliance with system policy, procedure and guidelines, and conducting a periodic review of this agreement.
- B. This Articulation Agreement is effective on 06/01/2014 and shall remain in effect until the end date of 12/31/2019 or for five years, whichever occurs first, unless terminated or amended by either party with 90 days prior written notice.
- C. The college and university shall work with students to resolve the transfer of courses should changes to either program occur while the agreement is in effect.
- D. This Articulation Agreement will be reviewed by both parties beginning 7/1/2019 (within six months of the end date).
- E. When a student notifies the receiving institution of his/her intent to follow this agreement, the receiving institution will encode course waivers and substitutions.

September 11, 2014

PROGRAM ARTICULATION TABLE

| | College (sending) | University (receiving) |
|--|---|-------------------------------------|
| Institution | Rochester Community and Technical College | University of Wisconsin River Falls |
| Program name | Environmental Science | Environmental Science |
| Award Type (e.g., AS) | AS | BS |
| Credit Length | 60 | 120 |
| CIP code (6-digit) | 03.010401 | 03.0104 |
| Describe program admission requirements (if any) | | |

Instructions

- List all required courses in both academic programs.
- MnTC goal areas transfer to the receiving institution according to the goal areas designated by the sending institution.
- Do not indicate a goal area for general education courses that are not part of the MnTC.
- For restricted or unrestricted electives, list number of credits.
- Credits applied: the receiving institution course credit amount may be more or less than the sending institution credit amount. Enter the number of credits that the receiving institution will apply toward degree completion.
- Show equivalent university-college courses on the same row to ensure accurate DARS encoding.
- Equiv/Sub/Wav column: If a course is to be encoded as equivalent, enter Equiv. If a course is to be accepted by the university as a "substitution" only for the purposes of this agreement, enter Sub. If a course requirement is waived by the receiving institution, enter Wav. If a course is to be accepted by the university as a MnTC goal area, restricted elective or unrestricted elective, leave the cell blank.

(To add rows, place cursor outside of the end of a row and press enter.)

SECTION A - Minnesota Transfer Curriculum-General Education

| College (sending) | | | University (receiving) | | | |
|--|----------------------|---------|--|----------------------|-----------------|---------------|
| course prefix, number and name | Goal(s) ¹ | Credits | course prefix, number and name | Goal(s) ¹ | Credits Applied | Equiv Sub Wav |
| Minnesota Transfer Curriculum-General Education | | | | | | |
| ENGL 1117 Reading and Writing Critically I | 1 | 4 | ENGL 100 Academic Reading and Writing | 1 | 4 | Equiv |
| ENGL 1118 Reading & Writing Critically II | 1 | 4 | ENG 200 Investigating Ideas: Reading, Writing, & the Disciplines | 1 | 4 | Equiv |
| COMM 1114 Fundamentals of Speech | 1 | 3 | COMS 101 Fundamentals of Oral Communication | 1 | 3 | Equiv |
| BIOL 1220 Concepts of Biology | 3 | 4 | BIOL 150 General Biology | 3 | 4 | Equiv |
| BIOL 1102 Plant Biology | 3 | 3 | BIOL 210 General Botany | 3 | 3 | Equiv |
| MATH 2208 Fundamentals of Statistics | 4 | 4 | MATH 216 Elementary Statistical Concepts | 3 | 4 | Equiv |
| CHEM 1127 Chemical Principles I & CHEM 1128 Chemical Principles II or PHYS 1117 Introductory Physics I & PHYS 1118 Introductory Physics II | 3 | 8 or 8 | CHEM 121 General Chemistry I & CHEM 122 General Chemistry II or PHYS 121 Algebra-based | 3 | 8 or 8 | Equiv |

¹ MnTC goal areas transfer to the receiving college/university according to the goal areas designated by the sending college/university

| | | | | | | |
|--|------------------|----|--|------------------|---|-------|
| | | | Physics I & PHYS 122 Algebra-based Physics II | | | |
| SOC 1614 Introduction to Sociology | 5 | 3 | SOC 101 Introduction to Sociology | 2 | 3 | Equiv |
| PHIL 1125 Ethics OR PHIL 1130 Environmental Ethics | 6 | 3 | PHIL 240 Social Ethics OR PHIL 303 Environmental Ethics | 6 | 3 | Equiv |
| BIOL 1100 Environmental Biology | 3, 10 | 3 | ESM 105 Intro to Environmental Studies | 3, 10 | 3 | Equiv |
| MnTC/General Education Total | | 39 | | | | |
| Special Notes, if any: The option of CHEM 1127 or PHYS 1117 provides students to direct study toward primary interests and provides students more flexibility in course scheduling for numerous science courses with lab components. | | | | | | |
| SECTION B - Major, Emphasis, Restricted and Unrestricted Electives or Other | | | | | | |
| (pre-requisite courses, required core courses, required courses in an emphasis, or electives (restricted or general) within the major). <u>Restricted electives (in Major)</u> fulfill a specific requirement within a major. Example A: "Chose two of the following three courses;" Example B: A Biology degree may require 40 science credits (20 credits of required courses + 20 credits of listed related courses, such as botany, genetics, sociobiology, etc. which students can select). | | | | | | |
| Major, Emphasis, Restricted, Unrestricted Electives or Other Courses | | | | | | |
| BIOL 1220 Concepts of Biology (counted in section A) | (4) | | BIOL 150 General Biology (3) (counted in section A) | (4) | | |
| BIOL 1230 Survey of Life Forms | 4 | | BIOL 150 General Biology | 4 | | Equiv |
| BIOL 2000 Ecology | 4 | | BIOL 360 Ecology | 4 | | Equiv |
| BIOL 2200 Zoology | 4 | | BIOL 230 General Zoology | 4 | | Equiv |
| BIOL 2300 Genetics | 4 | | BIOL 211 Genetics & Evolution | 4 | | Equiv |
| BIOL 1102 Plant Biology (counted in section A) | (3) | | BIOL 210 General Botany (3) (counted in section A) | (3) | | |
| BIOL 1300 Biological Applications of GIS Technology | 3 | | GEOG 250 Introduction to Geographic Information Science | 3 | | Equiv |
| BIOL 1400 Environmental Science Internship | 2 | | ESM 270 Internship I | 2 | | Equiv |
| MATH 2208 Fundamentals of Statistics (counted in section A) | (4) | | MATH 216 Elementary Statistical Concepts (3) (counted in section A) | (4) | | |
| BIOL 1100 Environmental Biology (counted in section A) | (3) | | ESM 105 Intro to Environmental Studies (3) (counted in section A) | (3) | | |
| BIOL 1400 Environmental Science Internship (counted in section A) | (2) | | ESM 270 Internship I (2) (counted in section A) | (2) | | |
| CHEM 1127 Chemical Principles I & CHEM 1128 Chemical Principles II or PHYS 1117 Introductory Physics I (counted in section A) & PHYS 1118 Introductory Physics II | (8) or (8) | | CHEM 121 General Chemistry I & CHEM 122 General Chemistry II or PHYS 121 Algebra-based Physics I & PHYS 122 Algebra-based Physics II (counted in section A) | (8) or (8) | | |
| Unrestricted elective credits (if none enter 0) | 0 | | College's unrestricted elective credits accepted in transfer (if none enter 0) | 0 | | |
| Major, Emphasis, Unrestricted Electives Total | 21 | | Total College Credits Applied (sum of sections A and B) | 60 | | |

SECTION C - Remaining University (receiving) Requirements

| | course prefix, number and name | Credits |
|-------------------|--|----------------|
| Required Courses: | Environmental Science Core: | (27) |
| | ENGL 367 Technical Writing | 3 |
| | ESM 220 Environmental Sustainability: Theory, Issues, and Management | 3 |
| | ESM 305 Environmental Impact Assessment | 2 |
| | ESM 360 Applied Hydrology and Water Quality | 4 |
| | ESM 412 Chemical Fate and Transport in the Environment | 3 |
| | ESM 413 Environmental Analysis | 4 |
| | ESM 485 Seminar in Resource Management | 1 |
| | GEOL 102 Introductory Geology Lab | 1 |
| | Choose one of the following: ESM 303 Environmental Policies and Administration BIOL 355 Environmental Law POL 355 Environmental Law | 3 |
| | Choose one of the following: MATH 226 Fundamentals of Statistics MATH 326 Applied Statistics ENSC 341 Biometrics GEOG 365 Quantitative Techniques for Geographers | 3 |
| | Required Supporting Courses: | (14-29) |
| | MATH 166 Calculus 4 cr CHEM 120 Introduction to General Chemistry 6 cr or CHEM 121 General Chemistry I 5 cr CHEM 122 General Chemistry II 5 cr (these chemistry requirements may have already been met above) | 4-15 |
| | Choose one of the following two chemistry lecture/lab series: A. CHEM 231 Organic Chemistry I 3 cr CHEM 236 Organic Chemistry Lab I 1 cr B. CHEM 250 Analytical Chemistry 4 cr | 4 |
| | Choose one of the following two physics classes: (this may have already been met above) A. PHYS 121 Algebra-based Physics 1 4 cr | 0-4 |

| | | |
|--|--|-------|
| | B. PHYS 131 General Physics I 4 cr | |
| | Choose one of the following two courses: BIOL 210 General Botany 3 cr BIO 230 General Zoology 3 cr | 3 |
| | Choose one of the following two courses: BIOL 240 Cell and Molecular Biology 3 cr BIOL 324 Microbiology 3 cr | 3 |
| | Directed Electives: | 18 |
| | A minimum of 6 credits in 400 level or greater. Courses taken as part of the supporting requirement cannot be double counted as directed electives. <u>SOIL 311, SOIL 325, SOIL 350, SOIL 440, SOIL 460</u> 3-4 cr. <u>BIOL 210, BIOL 230, BIOL 240, BIOL 310, BIOL 324, BIOL 330, BIOL 344, BIOL 354, BIOL 360, BIOL 434, BIOL 444</u> 3-4 cr. <u>GEOG 212, GEOG 250, GEOG 255, GEOG 316, GEOG 360, GEOG 368, GEOG 379, GEOG 412, GEOG 455, GEOG 460</u> 3-12 cr. <u>PHYS 152, PHYS 157, PHYS 162, PHYS 102, CHEM 231 and CHEM 236, CHEM 232 and CHEM 237, CHEM 250, CHEM 356</u> 1-3 cr. <u>AGEN 325, AGEN 365, AGEN 425, GENG 450</u> 3-4 cr. <u>GEOL 269, GEOL 327, GEOL 330, GEOL 417, GEOL 445</u> 2-4 cr. <u>ESM 270, ESM 333, ESM 363, ESM 370, ESM 377</u> 2-4 cr. <u>AGEC 450</u> 3 cr. | 18 |
| | Total Remaining University Credits | 59-74 |

Special Notes, if any:

Goal 1 CW: ENGL 100, CS: COMS 101, CA: ENGL 200

Goal 2 SB: SOCI 100, need one more course, HF: need 2 courses

Goal 3 M: MATH 226, SL: BIOL 150, need GEOL 102, S: need GEOL 101

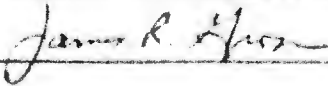


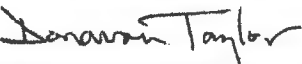
Goal 4 MD: need 1 course

Goal 5 HW: need 3 courses, EC: ESM 105

Students also need to complete one course in each of two university requirements categories: American cultural diversity and global perspectives.

SECTION D - Summary of Total Program Credits

| College (sending) Credits | | University (receiving) Requirements | |
|--|-----------|---|----------------|
| MnTC/General Education | 39 | | |
| Major, Emphasis, Unrestricted Electives or Other | 21 | | |
| Total College Credits | 60 | Total College Credits Applied | 60 |
| | | Remaining credit to be taken at the university (receiving institution) | 59-74 |
| | | Total Program Credits | 119-134 |
| Special Notes, if any: | | | |

| College | Name | Signature | Date |
|---|------------------|--|--------------|
| Chief Academic Officer | James R. Gross |  | 10/1/14 |
| Title | | | |
| University | Name | Signature | Date |
| Chief Academic Officer UW-River Falls, Provost | Fernando Delgado |  | 12/4/14 |
| College of Agriculture, Food and Environmental Sciences, Dean | Dale Gallenberg |  | DEC - 4 2014 |
| Title | | | |
| Department of Plant and Earth Science Chair | Donavon Taylor |  | 5 Dec 2014 |
| DARS Encoder | | | |
| Date when equivalencies were verified/encoded in DARS by the receiving MnSCU institution. | | | |

September 11, 2014