

2 + 2 Joint Articulation Transfer Agreement

Bachelor of Science in Physics (Secondary Education Emphasis)

Colorado State University – Pueblo And Pueblo Community College

| B.S. Requirements at CSU-Pueblo | | | A.S. Requirements at PCC | | |
|--|--|-----------|----------------------------------|--|-----------|
| Lower Division General Education Requirements | | | Equivalent Courses at PCC | | |
| Course # | Course Title | Credits | Course # | Course Title | Credits |
| ENG 101 | Composition I | 3 | ENG 121 | English Composition I | 3 |
| ENG 102 | Composition II | 3 | ENG 122 | English Composition II | 3 |
| SPCOM 115 | Speaking and Listening | 3 | COM 115 | Public Speaking | 3 |
| Humanities | Select from statewide Gen Ed Core | 6 | Humanities | Select from statewide Gen Ed Core | 9 |
| Social Science | Select from statewide Gen Ed Core | 3 | Social Science | Select from statewide Gen Ed Core | 3 |
| PSYCH 151 or PSYCH 251 | Intro to Human Development or Childhood and Adolescence | 3 | PSY 235 or PSY 238 | Human Growth & Development or Child Development | 3 |
| History | Select from Statewide Gen Ed Core | 3 | History | Select from Statewide Gen Ed Core | 3 |
| MATH 126 | Calculus and Analytic Geometry I | 5 | MAT 201 | Calculus I | 5 |
| Physical and Life Sciences | | | Physical and Life Sciences | | |
| CHEM 121/L and CHEM 122/L | CHEM 121/L General Chemistry I and CHEM 122/L General Chemistry II | 5 5 | CHE 111 and CHE 112 | General College Chemistry I and General College Chemistry II | 5 5 |
| Subtotal | | 39 | Subtotal | | 42 |
| Required Physics Core Courses | | | Equivalent Courses at PCC | | |
| PHYS 110 | Astronomy | 3 | AST 101 | Astronomy I | 4 |
| PHYS 140/L | Light, Energy, and the Atom/Lab | 4 | PHY 105 | Conceptual Physics | 4 |
| PHYS 221/L | General Physics I/Lab | 5 | PHY 211 | Physics: Calculus-based I | 5 |
| PHYS 222/L | General Physics II/Lab | 5 | PHY 212 | Physics: Calculus-based | 5 |
| PHYS 321 | Thermodynamics | 3 | | | |
| PHYS 322 | Advanced Laboratory - Heat | 1 | | | |
| PHYS 323/L | General Physics III/Lab | 5 | | | |
| PHY 341 | Optics | 3 | | | |
| PHYS 342 | Advanced Laboratory – Optics | 1 | | | |
| PHYS 480 | Practicum in Laboratory Instruction | 1 | | | |
| Subtotal | | 31 | Subtotal | | 10 |
| Related Course Requirements | | | Equivalent Courses at PCC | | |
| BIOL 100/L | Principles of Biology | 4 | BIO 105 | Science of Biology | 4 |
| BIOL 121/L | Environmental Conservation | 4 | | | |
| GEOL 101/L | Earth Science/Lab | 4 | GEY 111 | Physical Geology | 4 |
| CHEM 121/L | General Chemistry I/Lab (see Gen Ed Core) | (5) | CHE 111 | General College Chemistry I (see Gen Ed Core) | (5) |
| CHEM 122/L | General Chemistry II/Lab See Gen Ed Core) | (5) | CHE 112 | General College Chemistry II (see Gen Ed Core) | (5) |
| MATH 126 | Calculus & Analytic Geometry I (see Gen Ed Core) | (5) | MAT 201 | Calculus I (see Gen Ed Core) | (5) |
| MATH 224 | Calculus & Analytic Geometry II | 5 | MAT 202 | Calculus II | 5 |

| | | | | | |
|--|--------------------------------|-----------|----------------------------------|----------------------------------|------------|
| Subtotal | | 17 | Subtotal | | 5 |
| Secondary Science Teaching Requirements | | | Equivalent Courses at PCC | | |
| ED 202 | Foundations of Education | 3 | EDU 221 | Introduction to Education | 3 |
| ED 280 | Educational Media & Technology | 3 | EDU 261 | Teaching, Learning, & Technology | 3 |
| ED 301 | Frameworks of Teaching | 3 | | | |
| ED 412 | Teaching Diverse Learners | 3 | | | |
| ED 444 | Teaching Secondary Science | 4 | | | |
| ED 485 | Capstone Seminar in Education | 2 | | | |
| ED 488 | Secondary Student Teaching | 12 | | | |
| RDG 435 | Content Area Literacy | 4 | | | |
| Subtotal | | 34 | Subtotal | | 3 |
| Total Credits for A.S. | | | | | 60 |
| Total Transfer Credit Accepted for A.S. | | | | | 60 |
| Total Additional Credit Required for B.S. | | | | | 64 |
| Total B.S. Degree Requirements | | | | | 124 |

Students who successfully complete this program as specified are eligible to apply for a *Destination CSU-Pueblo* scholarship.

This articulation transfer agreement replaces all previous agreements between PCC and CSU-Pueblo in Bachelor of Science in Physics (Secondary Education Emphasis). This agreement will be reviewed annually and revised (if necessary) as mutually agreed.

cam: 02/26/09
revised: 02/22/10
revised: 06/09/10