



Cerritos College
ARTICULATION AGREEMENT

<p>Cerritos College Course: PMT 100 Plastics Manufacturing (2 units)</p> <p>Cerritos College 11110 Alondra Blvd. Norwalk, CA 90650</p>	<p>High School Course: Plastics Technologies</p> <p>Warren High School 8141 De Palma Street Downey, CA 90241</p>
<p>General Course Description: This course provides knowledge of materials and processes used in the field of plastic manufacturing today. An overview of plastic technology and application of production processes, as well as fabrication methods are covered. This course includes molding, forming, reinforced materials, bonding, laminating, and finishing techniques, and plastic materials identification.</p> <p>Plastics Technologies focuses on design and work-based learning prepares students for careers across automotive, construction, medical, food and beverage, aerospace, transportation, furniture, sport and leisure, agriculture, and additional industry sectors.</p>	
<p>College Prerequisite(s): none</p>	<p>HS Prerequisite(s): none</p>
<p>Advisories/Recommendations: none</p>	
<p>Course Content:</p> <ol style="list-style-type: none"> 1. Orientation-Plastics Fundamentals <ul style="list-style-type: none"> • History of plastics • Present applications of plastics • Emerging plastic markets 2. Fabrication equipment and safe operations <ul style="list-style-type: none"> • Power tools and equipment • Hand tools and techniques • Power equipment 3. Shop Safety <ul style="list-style-type: none"> • Tools and equipment • Materials handling storage • Lab procedures 4. Molding Processes <ul style="list-style-type: none"> • Injection molding • Compression molding • Thermoforming • Rotational molding • Blow molding • Foam molding • Thermoforming 	

5. Reinforced Plastics

- Materials
 - Processes
 - Applications
- Processes
 - Selection
 - Advantages
 - Disadvantages
- Equipment
 - Advantages
 - Disadvantages

6. Molds

- Flexible
- Prototype
- Production

7. Plastics Materials

- Thermosets
- Thermoplastics
- Specialty types

8. Exploring careers related to or informed by the plastics technologies learned in the course.

- Sectors and companies
- Roles and skills
- Certifications
- Next steps in learning and preparing for a work transition

Competencies and Skill Requirements.

At the conclusion of this course, the student should be able to:

- Identify a minimum of four basic plastics processing methods.
- Demonstrate proficiency in identifying two plastic materials and part recycling methods found in industry today.
- Demonstrate proficiency in identifying four plastics materials.
- Identify and differentiate between thermoplastics and thermosetting materials.

Measurement Methods:

- Quizzes
- Midterm examination

Textbooks or Other Support Materials:

- Industrial Plastics Theory and Applications. CENGAGE Learning. 6th (or current) edition. 2016. 978-1285061238

Procedures for Course Articulation:




Cerritos College credit for the articulated course listed above may be received when the following criteria are met:

1. Student has completed the articulated course listed above, *Plastics Technologies*, with a grade of "C" or higher.
3. Student must enroll at Cerritos College within two (2) years from the semester date in which the course was completed.
4. Student will complete and submit the Cerritos College *Petition for Credit by Examination for Articulated High School Course* form to the Office of Educational Partnerships & Programs at Cerritos College.
5. A maximum of 30 units may be awarded through credit by examination.

This Agreement will be reviewed annually and will remain in effect until cancelled by either party giving 30 days written notice.

High School/ROP District Signatures

Cerritos College Signatures

	Jun 27, 2023	 <small>Miodrag Micic (Jun 28, 2023 20:12 PDT)</small>	Jun 28, 2023
Instructor/Department Chair	Date	Faculty/Department Chair	Date
<i>Cari White</i>	Jun 28, 2023	 <small>Yannick Rea (Jun 28, 2023 20:23 PDT)</small>	Jun 28, 2023
Principal	Date	Dean of Instruction	Date
<i>John A. Garcia, Jr.</i>	Jun 28, 2023	<i>Wei Zhou</i> <small>Wei Zhou (Jun 29, 2023 08:28 PDT)</small>	Jun 29, 2023
Superintendent	Date	Vice President	Date