

# BAKING (314)

## 314-120. Science of Baking Principles. (2 Credits)

Apply the scientific concepts and techniques of baking. Study topics such as weights and measures, equipment, baking terminology and the function of ingredients. A baking kit is required and can be purchased from the WCTC Bookstore. A uniform is also required and is available at the WCTC Bookstore.

Prerequisites: (316-110 (may be taken concurrently) with a minimum grade of C) and (854-793 (may be taken concurrently) with a minimum grade of S or College Proficiency - Math or High School GPA 2.60 or Higher or COMPASS-Pre-Algebra with a score of 25 or ACT-Math with a score of 14 or ASSET-Numerical Skills with a score of 32 or Accuplacer Arithmetic34) or Next-Gen Accuplacer Arithmetic with a score of 210  
See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=120>)

## 314-121. Breads and Rolls. (1 Credit)

Take an in-depth look at the production of breads and rolls. Examine the principles of scaling, mixing, fermentation, proofing and baking while learning about artisan-style breads and rolls, sour starters, bagels, pretzels, crackers, flat breads and other ethnic preparations.

Prerequisites: 314-120 (may be taken concurrently) with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=121>)

## 314-122. Principles of Baking. (1 Credit)

Learn basic baking principles and procedures while exploring techniques for making yeast-based products, quick breads and pies.

Prerequisites: 314-120 (may be taken concurrently) with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=122>)

## 314-123. Cake Production and Decorating. (2 Credits)

Prepare a variety of cookies, sponge and specialty cakes, soufflés, fruit flans, and layered and molded cakes. Practice the art of decorating using rolled fondant, royal icing, glazing and icing.

Prerequisites: 314-120 (may be taken concurrently) with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=123>)

## 314-124. Pastry, Specialty Plated Dsrt. (1 Credit)

Study fine pastry and specialty dessert production methods and build on knowledge and skills from prior course work to create simple and complex plated desserts, balancing flavors, textures, colors, aromas and plate layout, garnish and presentation for an assortment of menu and service styles.

Prerequisites: (314-120 with a minimum grade of C and 314-126 with a minimum grade of C and 314-127 with a minimum grade of C and 314-129 (may be taken concurrently) with a minimum grade of C)

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=124>)

## 314-125. Confections. (1 Credit)

Learn the handling and production techniques for all types of chocolates, fudges, truffles, cremes, nougats and marzipan. Experiment with presentation.

Prerequisites: 314-120 with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=125>)

## 314-126. Cookies/Bars/Petit Fours Sec. (1 Credit)

Cookie production styles and techniques including bagged, rolled, filled and complex cookies. Also, simple and complex bars and petit fours sec.  
Prerequisites: (314-120 (may be taken concurrently) with a minimum grade of C and 316-110 (may be taken concurrently) with a minimum grade of C)

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=126>)

## 314-127. Custards/Mousse/Souffle/Fr Des. (1 Credit)

Custards, mousse (light and heavy), soufflé and egg foams, panna cotta and frozen desserts (gelato, ice cream, bombes, sorbet, sherbet). Instruction also covers specialty equipment use, temperature, foam control, application of heat and cold to proteins and fats.

Prerequisites: (314-120 (may be taken concurrently) with a minimum grade of C and 316-110 (may be taken concurrently) with a minimum grade of C and 314-131 (may be taken concurrently) with a minimum grade of C)

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=127>)

## 314-128. Artisan Breads. (1 Credit)

Emphasis on hand-crafted breads with preferments. Includes creating and using preferments (starters, sourdough, cultures), gluten development, aging doughs, simple, complex and multi-grain breads.

Prerequisites: (314-120 (may be taken concurrently) with a minimum grade of C and 316-110 (may be taken concurrently) with a minimum grade of C and 314-121 (may be taken concurrently) with a minimum grade of C)

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=128>)

## 314-129. Pies, Tarts, Fillings. (1 Credit)

Topics include flakey and mealy crust, multiple filling styles, soft fill, pre-cooked, raw fill, cream fill, and more. Also, tart assembly and production, alternate pastry and cookie crusts.

Prerequisites: (314-120 with a minimum grade of C and 316-110 with a minimum grade of C and 314-122 with a minimum grade of C)

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=129>)

## 314-131. Culinary for Bakers. (2 Credits)

Basic culinary skills with a focus on bakery/dessert products. Topics include knife skills, knife cuts, cooking methods, sauces and more.

Prerequisites: 316-110 (may be taken concurrently) with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=131>)

## 314-132. Bakeshop Production. (1 Credit)

Speed, production planning and skill development in the bakeshop.

Prerequisites: (314-122 with a minimum grade of C and 314-129 (may be taken concurrently) with a minimum grade of C and 314-121 (may be taken concurrently) with a minimum grade of C)

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=132>)

**314-134. Baking Pastry Prod and Mgmt 1. (4 Credits)**

The first of two courses in bakeshop production and management, this course will cover production planning and scheduling, equipment use and planning, retail packaging and sales, and production of multiple products for retail and wholesale use. Emphasis on management, costing, pricing in support of production. Students will also expand their production skills and knowledge base.

Prerequisites: 109-135 with a minimum grade of C and 314-132 with a minimum grade of C and 314-124 with a minimum grade of C or 314-142 with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=134>)

**314-135. Baking Pastry Prod and Mgmt 2. (4 Credits)**

The second of two courses in bakeshop production and management, this course will expand on content from Bakeshop Production and Management 1 expanding on production planning and scheduling, equipment use and planning, retail packaging and sales, and production of multiple products for retail and wholesale use. Emphasis on management, costing, pricing, record keeping, order and inventory control, customer service in support of production. Students will continue to refine their production skills and knowledge base.

Prerequisites: (314-134 with a minimum grade of C)

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=135>)

**314-140. Fundamentals of Baking 1. (2 Credits)**

Take an in-depth look at the production of quick breads and yeast-leavened breads and rolls. Examine the principles of scaling, mixing methods, leavening, fermentation, proofing and baking, while learning about scones, muffins, biscuits, breads, rolls, bagels, pretzels, crackers, flatbreads, etc. in low- and high-gluten products.

Prerequisites: 314-120 (may be taken concurrently) with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=140>)

**314-141. Fundamentals of Baking 2. (2 Credits)**

From a high-gluten standpoint, explore hand-crafted breads with preferments (starters, sourdough and cultures). Gain hands-on skills in gluten development, aging doughs, and creating simple, complex and multi-grain breads. From a low-gluten standpoint, practice cookie production styles and techniques, including bagged, rolled, filled and complex cookies. Explore simple and complex bars and petit fours sec.

Prerequisites: 314-120 (may be taken concurrently) with a minimum grade of C and 316-110 (may be taken concurrently) with a minimum grade of C and 314-140 (may be taken concurrently) with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=141>)

**314-142. Custard, Mousse, Plate Dessert. (2 Credits)**

Explore custards, light and heavy mousse, soufflé and egg foams, panna cotta, and frozen desserts including gelato, ice cream, bombes, sorbet and sherbet. Learn to use specialty equipment, including temperature setting, foam control and the application of heat and cold to proteins and fats. Apply knowledge of pastry and specialty dessert production methods to create simple and complex plated desserts. Practice balancing flavors, textures, colors and aromas while mastering plate layout, garnish and presentation for an assortment of menu and service styles.

Prerequisites: 314-120 (may be taken concurrently) with a minimum grade of C and 316-110 (may be taken concurrently) with a minimum grade of C and 314-140 (may be taken concurrently) with a minimum grade of C and 314-131 (may be taken concurrently) with a minimum grade of C or 316-100 (may be taken concurrently) with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=142>)

**314-143. Pies, Tarts and Confections. (2 Credits)**

Learn to create flaky and mealy crusts and multiple filling styles, including soft fill, pre-cooked, raw fill, cream fill and more. Practice assembling and producing tarts, as well as alternate pastry and cookie crusts. Expand your confections knowledge by learning the handling and production techniques for all types of chocolates, fudges, truffles, cremes, nougats and marzipan. Experiment with pie, tart and confection presentation.

Prerequisites: 314-120 with a minimum grade of C and 316-110 with a minimum grade of C and 314-140 with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=143>)

**314-149. Baking Production. (2 Credits)**

Apply your skills in speed, production, planning and skill development in the bakeshop in this first-year capstone course.

Prerequisites: 314-141 with a minimum grade of C and 314-143 (may be taken concurrently) with a minimum grade of C and 314-140 (may be taken concurrently) with a minimum grade of C

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=149>)

**314-157. Baking and Pastry Internship. (1 Credit)**

The Baking & Pastry Management Internship experience provides valuable work experience specific to the Hospitality student major. Our primary focus is to give students a broader educational experience through work. The WCTC instructor/coordinator will work closely with the work site supervisor toward common educational objectives and goals. This course is specifically geared towards student success in the Baking & Pastry career fields. To complete an internship, WCTC must first verify that students have met the prerequisites. Please contact the Career Connections Department at 262.695.7848 or [internshipdepartment@wctc.edu](mailto:internshipdepartment@wctc.edu) for assistance.

Prerequisites: Approval of Co-op Ed Office

See sections of this course (<http://www.wctc.edu/academics/programs-courses/course-search/course-search-listing.php?code=314&num=157>)