



Pre-PAC Correlation



Food Science

Outline of Course	Food Science Fundamentals Pre-PAC
Topic 1: Exploring Food Science	
Unit 1: History of Food Science	1.A.1; 1.A.2; 1.A.3; 1.A.4; 6.C.1; 6.C.2; 6.C.3; 6.C.4; 6.D.1; 6.D.2; 6.D.3; 6.D.4; 6.D.5
Unit 2: Career Opportunities	1.A.2; 1.A.4; 1.B.1; 1.B.2; 1.B.3; 1.C.1; 1.C.2; 1.C.3; 1.C.4; 1.C.5; 1.C.6
Topic 2: The Food Science Laboratory	
Unit 1: Leadership Skills and Teamwork	1.C.5
Unit 2: Equipment, Measurement, and Safety	2.B.1; 2.B.2; 2.B.3; 6.A.1; 6.A.2; 6.A.3; 6.A.4; 6.A.5; 6.B.1; 6.B.2; 6.B.3; 6.B.4; 6.B.5; 6.B.6
Unit 3: Scientific Method	5.A.1; 5.A.2; 5.A.3; 5C; 6B
Unit 4: Food Safety Certification	2.B.1; 2.B.2; 2.B.3; 2.C.1; 2.C.2; 2.C.3; 2.C.4; 2.C.5; 2.C.6
Topic 3: Fundamentals of Chemistry	
Unit 1: Elements, Compounds, and Mixtures	5.B.1; 5.B.2; 5.B.3; 5.B.4; 5.B.5
Unit 2: Chemical Reactions and Physical Changes	5.B.1; 5.B.2; 5.B.3; 5.B.4; 5.B.5
Unit 3: Acids and Bases	5.B.1; 5.B.4
Unit 4: Energy	5.B.1; 5.B.2; 5.B.3; 5.B.4; 5.B.5
Topic 4: Nutrition Science	
Unit 1: Properties of Carbohydrates	3.A.1; 3.A.2; 3.A.3; 3.A.4; 3.F.1; 3.F.2; 3.F.3; 3.F.4; 3.F.5; 3.F.6; 5.C.1; 5.C.2; 5.C.3; 5.C.4; 5.C.5
Unit 2: Properties of Lipids and Fats	3.B.1; 3.B.2; 3.F.1; 3.F.2; 3.F.3; 3.F.4; 3.F.5; 3.F.6; 5.C.1; 5.C.2; 5.C.3; 5.C.4; 5.C.5

Unit 3: Protein Properties	3.C.1; 3.C.2; 3.F.1; 3.F.2; 3.F.3; 3.F.4; 3.F.5; 3.F.6; 5.C.1; 5.C.2; 5.C.3; 5.C.4; 5.C.5
Unit 4: Vitamins and Minerals	3.D.1; 3.D.2; 3.D.3; 3.F.1; 3.F.2; 3.F.3; 3.F.4; 3.F.5; 3.F.6; 5.C.1; 5.C.2; 5.C.3; 5.C.4; 5.C.5
Unit 5: Water Properties	3.E.1; 3.E.2; 3.E.3; 3.E.4; 3.F.1; 3.F.2; 3.F.3; 3.F.4; 3.F.5; 3.F.6
Topic 5: Food Chemistry	
Unit 1: Enzymes	5.B.1; 5.B.2; 5.B.3; 5.B.4; 5.B.5
Unit 2: Solutions and Colloidal Dispersions	5.B.1; 5.B.2; 5.B.3; 5.B.4; 5.B.5
Unit 3: Sensory Evaluation	4.C.1; 4.C.2; 4.C.3; 4.C.4; 4.C.5; 4.C.6; 4.C.7 5.D.1; 5.D.2; 5.D.3; 5.D.4; 5.E.1; 5.E.2; 5.E.3; 5.E.4
Unit 4: Food Fermentation	4.D.1; 4.D.2; 4.D.3; 4.D.4; 5.B.1; 5.B.2; 5.B.3; 5.B.4; 5.B.5; 5.C.1; 5.C.2; 5.C.3; 5.C.4; 5.C.5
Unit 5: Leavening Agents	5.B.1; 5.B.2; 5.B.3; 5.B.4; 5.B.5; 5.C.1; 5.C.2; 5.C.3; 5.C.4; 5.C.5
Unit 6: Food Additives	5.B.1; 5.B.2; 5.B.3; 5.B.4; 5.B.5; 5.C.1; 5.C.2; 5.C.3; 5.C.4; 5.C.5
Topic 6: Microbiology of Food	
Unit 1: Food safety	2.A.1; 2.A.2; 2.A.3; 2.A.4; 2.A.5; 2.A.6; 2.A.7; 2.A.8; 2.B.1; 2.B.2; 2.B.3; 2.D.1; 2.D.2; 2.D.3; 6.B.1; 6.B.2; 6.B.3; 6.B.4; 6.B.5; 6.B.6
Unit 2: Food Preservation	2.C.1; 2.C.2; 2.C.3; 2.C.4; 2.C.5; 2.C.6; 4.B.1; 4.B.2; 4.B.3; 4.B.4; 6.C.1; 6.C.2; 6.C.3; 6.C.4; 6.D.1
Unit 3: Food packaging	4.F.1; 4.F.2; 4.F.3; 4.F.4; 4.F.5