

2013 2014 SUMMER KIM101 and KIM 101E OUTCOMES	MIDTERM																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table	+	+	+	+				+	+		+														
2. Make calculations with using stoichiometry in chemical reactions							+			+		+	+			+	+								+
3. Solve different problems about liquid solutions and gases										+					+	+				+	+				
4. Make applications about heat, work, enthalpy and internal energy														+				+	+			+			
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories					+	+																	+	+	
6. Show the crystal structures of solids and skills to solve related problems																									
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration																									
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)							+	+				+	+				+							+	
AVERAGE (OVER 40) For KIM 101 : 21.41 For KIM 101E: 19.26																									

Outcomes are given for Booklet A

2013 2014 SUMMER KIM101 and KIM 101E OUTCOMES	FINAL EXAM																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table																+										
2. Make calculations with using stoichiometry in chemical reactions																									+	+
3. Solve different problems about liquid solutions and gases																		+								
4. Make applications about heat, work, enthalpy and internal energy											+															
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories	+	+																					+	+	+	
6. Show the crystal structures of solids and to have knowledge about the physical properties of solutions								+	+	+				+	+			+	+							
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration			+	+	+	+				+		+			+					+	+					+
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)			+	+	+		+	+	+				+	+			+		+							+
AVERAGE(OVER 40) For KIM 101 : 18.62 For KIM 101E: 17.50																										

Outcomes are given for Booklet A

2014-2015 FALL KIM101 and KIM 101E OUTCOMES	MIDTERM																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table	+								+			+	+	+	+										
2. Make calculations with using stoichiometry in chemical reactions		+	+	+	+																				+
3. Solve different problems about liquid solutions and gases				+	+	+	+																		+
4. Make applications about heat, work, enthalpy and internal energy								+	+	+	+														
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories																+	+	+	+	+	+	+	+	+	
6. Show the crystal structures of solids and skills to solve related problems																									
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration																									
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)	+		+					+	+															+	
AVERAGE (OVER 40) For KIM 101 : 22.30 For KIM 101E: 19.25																									

Outcomes are given for Booklet A

2014-2015 FALL KIM101 and KIM 101E OUTCOMES	FINAL EXAM																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table					+																		+		
2. Make calculations with using stoichiometry in chemical reactions														+						+					
3. Solve different problems about liquid solutions and gases													+		+	+								+	
4. Make applications about heat, work, enthalpy and internal energy										+														+	
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories	+	+		+		+											+	+							+
6. Show the crystal structures of solids and to have knowledge about the physical properties of solutions								+	+				+		+				+						
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration			+				+				+	+				+					+	+			
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)			+				+	+	+				+	+					+						
AVERAGE(OVER 40) For KIM 101 : 19.44 For KIM 101E: 16.32																									

Outcomes are given for Booklet A

2014-2015 SPRING KIM101 and KIM 101E OUTCOMES	MIDTERM																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table	+	+			+					+						+	+	+	+	+					
2. Make calculations with using stoichiometry in chemical reactions	+		+	+		+		+	+																
3. Solve different problems about liquid solutions and gases				+		+	+		+		+	+													
4. Make applications about heat, work, enthalpy and internal energy													+	+											
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories																		+	+		+	+	+	+	+
6. Show the crystal structures of solids and skills to solve related problems																									
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration																									
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)	+	+						+			+					+									
AVERAGE (OVER 40) For KIM 101 : 22.0 For KIM 101E: 22.2																									

Outcomes are given for Booklet A

2014-2015 SPRING KIM101 and KIM 101E OUTCOMES	FINAL EXAM																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table																			+		+			+	+	
2. Make calculations with using stoichiometry in chemical reactions	+				+					+																
3. Solve different problems about liquid solutions and gases																							+			
4. Make applications about heat, work, enthalpy and internal energy									+			+	+		+											
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories																+	+		+							+
6. Show the crystal structures of solids and to have knowledge about the physical properties of solutions						+	+	+	+		+			+							+	+				
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration	+	+	+	+	+																					
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)						+	+	+					+	+	+							+				
AVERAGE(OVER 40) For KIM 101 : 20.2 For KIM 101E: 19.7																										

Outcomes are given for Booklet A

2014-2015 SUMMER KIM101 and KIM 101E OUTCOMES	MIDTERM																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table			+		+			+	+			+			+										+
2. Make calculations with using stoichiometry in chemical reactions										+			+			+	+		+						
3. Solve different problems about liquid solutions and gases		+				+										+		+	+	+		+			
4. Make applications about heat, work, enthalpy and internal energy	+			+							+			+											
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories								+													+		+	+	
6. Show the crystal structures of solids and skills to solve related problems																									
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration																									
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)	+			+							+			+				+				+			+
AVERAGE (OVER 40) For KIM 101 : 20.13 For KIM 101E: 19.55																									

Outcomes are given for Booklet A

2014-2015 SUMMER KIM101 and KIM 101E OUTCOMES	FINAL EXAM																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table					+																		+		+
2. Make calculations with using stoichiometry in chemical reactions									+					+									+		
3. Solve different problems about liquid solutions and gases			+				+		+			+													
4. Make applications about heat, work, enthalpy and internal energy				+														+							
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories		+									+											+			
6. Show the crystal structures of solids and to have knowledge about the physical properties of solutions			+					+							+	+									
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration	+				+	+	+			+			+	+				+	+	+		+		+	+
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)	+				+			+								+	+							+	+
AVERAGE(OVER 40) For KIM 101 : 18.78 For KIM 101E: 17.50																									

Outcomes are given for Booklet A

2015-2016 FALL KIM101 and KIM 101E OUTCOMES	MIDTERM																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table		+	+	+												+	+		+	+	+				+
2. Make calculations with using stoichiometry in chemical reactions	+		+		+	+		+	+																
3. Solve different problems about liquid solutions and gases							+		+	+	+	+													
4. Make applications about heat, work, enthalpy and internal energy													+	+	+										
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories																		+			+	+	+	+	
6. Show the crystal structures of solids and skills to solve related problems																									
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration																									
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)	+	+		+	+					+			+	+				+							
AVERAGE (OVER 40) For KIM 101 : 24.00 For KIM 101E: 21.07																									

Outcomes are given for Booklet A

2015-2016 FALL KIM101 and KIM 101E OUTCOMES	FINAL EXAM																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table																					+	+	+	+		
2. Make calculations with using stoichiometry in chemical reactions																									+	+
3. Solve different problems about liquid solutions and gases		+	+					+	+	+			+													
4. Make applications about heat, work, enthalpy and internal energy													+	+											+	
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories																		+	+	+	+					
6. Show the crystal structures of solids and to have knowledge about the physical properties of solutions									+		+	+				+	+									
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration	+	+	+	+	+	+	+			+		+		+												+
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)					+					+		+				+									+	
AVERAGE(OVER 40) For KIM 101 : 17.10 For KIM 101E: 14.46																										

Outcomes are given for Booklet A

2015-2016 SPRING KIM101 and KIM 101E OUTCOMES	MIDTERM																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table	+											+	+	+	+	+					+				+
2. Make calculations with using stoichiometry in chemical reactions		+	+	+	+	+	+																		
3. Solve different problems about liquid solutions and gases							+	+	+	+	+													+	+
4. Make applications about heat, work, enthalpy and internal energy																				+					
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories																	+	+		+		+			
6. Show the crystal structures of solids and skills to solve related problems																									
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration																									
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)	+	+	+	+		+					+	+		+	+										
AVERAGE (OVER 40) For KIM 101 : 21.46 For KIM 101E: 21.31																									

Outcomes are given for Booklet A

2015-2016 SPRING KIM101 and KIM 101E OUTCOMES	FINAL EXAM																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table	+					+	+		+																
2. Make calculations with using stoichiometry in chemical reactions	+	+	+																	+					
3. Solve different problems about liquid solutions and gases			+	+										+											
4. Make applications about heat, work, enthalpy and internal energy					+						+		+											+	+
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories									+	+															
6. Show the crystal structures of solids and to have knowledge about the physical properties of solutions										+	+	+		+	+										
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration												+				+	+	+	+	+	+	+	+		
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)	+	+	+		+						+		+		+									+	+
AVERAGE(OVER 40) For KIM 101 : 18.56 For KIM 101E: 17.84																									

Outcomes are given for Booklet A

2015-2016 SUMMER KIM101 and KIM 101E OUTCOMES	MIDTERM																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table	+						+	+	+				+	+	+									+	
2. Make calculations with using stoichiometry in chemical reactions		+	+	+		+										+	+						+	+	
3. Solve different problems about liquid solutions and gases					+	+										+		+					+		+
4. Make applications about heat, work, enthalpy and internal energy																			+	+	+				
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories											+	+	+												
6. Show the crystal structures of solids and skills to solve related problems																									
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration																									
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)	+	+	+	+												+	+					+			+
AVERAGE (OVER 40) For KIM 101 : 24.40 For KIM 101E: 21.67																									

Outcomes are given for Booklet A

2015-2016 SUMMER KIM101 and KIM 101E OUTCOMES	FINAL EXAM																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table		+					+					+														
2. Make calculations with using stoichiometry in chemical reactions											+												+			
3. Solve different problems about liquid solutions and gases									+		+															
4. Make applications about heat, work, enthalpy and internal energy						+								+	+	+						+				
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories		+										+						+					+		+	
6. Show the crystal structures of solids and to have knowledge about the physical properties of solutions	+			+			+	+	+	+			+													
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration			+		+							+						+		+	+		+		+	
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)			+	+		+		+				+			+										+	
AVERAGE(OVER 40) For KIM 101 : 18.58 For KIM 101E: 17.56																										

Outcomes are given for Booklet A

2016-2017 FALL KIM101 and KIM 101E OUTCOMES	MIDTERM																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table			+					+									+	+	+		+		+			
2. Make calculations with using stoichiometry in chemical reactions				+	+	+	+									+						+			+	
3. Solve different problems about liquid solutions and gases				+		+					+		+	+	+											+
4. Make applications about heat, work, enthalpy and internal energy												+											+			
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories	+	+									+	+	+													+
6. Show the crystal structures of solids and skills to solve related problems																										
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration																										
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)				+	+		+							+	+		+	+				+			+	
AVERAGE (OVER 40) For KIM 101 : 17.90 For KIM 101E: 15.04																										

Outcomes are given for Booklet A

2016-2017 FALL KIM101 and KIM 101E OUTCOMES	FINAL EXAM																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table		+	+																						
2. Make calculations with using stoichiometry in chemical reactions						+																+		+	
3. Solve different problems about liquid solutions and gases									+							+								+	
4. Make applications about heat, work, enthalpy and internal energy				+														+			+		+		
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories			+																+						
6. Show the crystal structures of solids and to have knowledge about the physical properties of solutions	+	+									+		+	+	+		+					+		+	+
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration					+	+	+	+	+	+		+						+			+	+			
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)				+		+	+	+		+		+	+	+	+		+								+
AVERAGE(OVER 40) For KIM 101 : 15.04 For KIM 101E: 13.92																									

Outcomes are given for Booklet A

2016-2017 SPRING KIM101 and KIM 101E OUTCOMES	MIDTERM																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table										+				+	+	+	+	+								
2. Make calculations with using stoichiometry in chemical reactions	+		+	+	+			+																		
3. Solve different problems about liquid solutions and gases		+		+	+			+											+	+	+	+				
4. Make applications about heat, work, enthalpy and internal energy											+												+	+	+	
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories						+	+		+	+		+	+													
6. Show the crystal structures of solids and skills to solve related problems																										
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration																										
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)			+												+				+		+	+				
AVERAGE (OVER 40) For KIM 101 : 19.28 For KIM 101E: 19.42																										

Outcomes are given for Booklet A

2016-2017 SPRING KIM101 and KIM 101E OUTCOMES	FINAL EXAM																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1. Identify and apply atomic theories and useful relationships from the periodic table																	+				+					
2. Make calculations with using stoichiometry in chemical reactions									+				+			+		+	+							
3. Solve different problems about liquid solutions and gases						+													+							
4. Make applications about heat, work, enthalpy and internal energy																				+					+	
5. Set up the three dimensional shape of molecular compounds with using their chemical bonding knowledge and some other bond theories			+												+											
6. Show the crystal structures of solids and to have knowledge about the physical properties of solutions	+	+	+	+	+	+	+						+				+							+		
7. Solve problems about thermodynamic, chemical equilibrium, acid and base concepts and concentration								+	+	+	+	+		+									+	+	+	+
8. Integrate their chemistry knowledge to their daily life with the real-world examples (examples relevant to the biological sciences, engineering and the environmental sciences)		+	+	+		+						+	+	+		+	+	+						+	+	
AVERAGE(OVER 40) For KIM 101 : 20.18 For KIM 101E: 18.86																										

Outcomes are given for Booklet A