## Content Preparation Update Worksheet Earth Science

						Applic	cant Name: Date:	
evalua profes need t docum other This v (A) R	te the extensional organo be component that you earning opvill give the elevant Su	our admission into the program, you not to which your content preparate unization standards and, when need teted by graduation. As you are not have completed all the addition portunities you had throughout your reviewer a complete picture of your bject Matter Coursework since we, please report the required infortie your admission review, if any (1)	ion fulfilled both New York ded, to let you know what a ow at the end of your prograal experiences agreed upon our program to deepen your content preparation at of Admission Review	State of ddition am, we at the toprofici complet	ertifica al cours would ime of ency in ion of y	tion rec sework like you admissi specifi your tea	quirements and relevant and/or other experiences various to use this "Update" work ions (if any), and also to id a content preparation standarder preparation program.	vould ksheet to entify lards.
Notes	Course Number	Course Title		Credit Hours	Grade	Sem. taken	Institution where the course was taken	
Curre	ent cumula	ntive total # credit hours in scientive total # credit hours in earth	n science:	m, as w	rell as th	nose list	ted in the table above)	

## (B) Professional Organization Recommendations

In the table below, please indicate relevant experiences that occurred <u>after</u> your admission into the teacher preparation and contributed to your learning with respect to each of the content preparation standards identified by the National Science Teachers Association (NSTA) -- including opportunities you had in the context of courses taken as part of your teacher preparation program:

Competency requirements – unifying concepts		Relevant coursework or other experiences:	Comments
1.	Multiple ways we organize our perceptions of the world and how systems organize the studies and knowledge of science		
2.	Nature of scientific evidence and the use of models for explanation.		
3.	Measurement as a way of knowing and organizing observations of constancy and change.		
4.	Evolution of natural systems and factors that result in evolution of equilibrium.		
5.	Interrelationships of form, function, and behaviors in living and nonliving systems.		

Ea	mpetency requirements – rth Science core npetencies	Relevant coursework or other experiences:	Comments
	Characteristics of land, atmosphere, and ocean systems on Earth.		
2.	Properties, measurement, and classification of Earth materials.		
3.	Changes in the Earth including land formation and erosion.		
4.	Geochemical cycles including biotic and abiotic systems.		
5.	Energy flow and transformation in Earth systems.		
6.	Hydrological features of the Earth.		

Competency requirements - Earth Science core competencies	- Relevant coursework or other experiences:	Comments
7. Patterns and changes in the atmosphere, weather, and climate.		
8. Origin, evolution, and planetary behavior of Ear	rth.	
9. Origin, evolution, and properties of the universe	ò.	
10. Fundamental processes o investigating in the Earth space sciences.		
11. Sources and limitations of natural resources.	of	
12. Applications of Earth and space sciences to environmental quality an personal and community wealth and welfare.	d to	

Competency requirements – Earth Science advanced	Relevant coursework or other experiences:	Comments
competencies		
13. Gradual and catastrophic changes in the Earth.		
14. Oceans and their relationship to changes in atmosphere and climate.		
15. Hydrological cycles and problems of distribution and use of water.		
16. Dating of the Earth and other objects in the universe.		
17. Structures and interactions of energy and matter in the universe.		
18. Impact of changes in the Earth on the evolution and distribution of living things.		

Competency requirements – Earth Science advanced competencies	Relevant coursework or other experiences:	Comments
19. Issues related to changes in Earth systems such as global climate change, mine subsidence, and channeling of waterways.		
20. Historical development and perspectives in the Earth and space sciences, including contributions of significant figures and underrepresented groups, and the evolution of theories in these fields.		
21. How to design, conduct and report research in the Earth and space sciences.		
22. Applications of the Earth and space sciences and related technologies in society, business, industry and health fields.		

Competency requirements –	Relevant coursework or other experiences:	Comments
Earth Science supporting		
competencies		
23. Biology, including evolution, ecology, population dynamics and the flow of energy and materials through Earth systems.		
24. Chemistry, including broad concepts of inorganic, organic, and physical chemistries, and biochemistry; and basic laboratory skills.		
25. Physics, including electricity, forces and motions, energy, magnetism, thermodynamics, optics, and sound; as well as basic quantum theory.		
26. Mathematics, including statistics and probability.		