

**University of North Texas at Dallas  
Spring 2015  
SYLLABUS**

<b>EDEE 4330 D 090: Science Grades EC-6      3Hrs</b>	
<b>Department of Teacher Education      Division of Education and Human Services</b>	
<b>Instructor Name:</b>	<b>Dr. Ratna Narayan</b>
<b>Office Location:</b>	<b>201 N Dallas 1</b>
<b>Office Phone:</b>	<b>972 780 1340, Cell: 806 252 5277</b> Phone calls/texts to my cell are welcome between 9AM and 10 PM daily and replies can be expected within no more than 24 hours.
<b>Email Address:</b>	<b>Ratna.narayan@untdallas.edu</b>
<b>Office Hours:</b>	<b>Monday 1-5pm Wednesday 2:30 - 4:30 pm, Thursday 2:30 – 5:30 pm, or by appointment</b>
<b>Classroom Location:</b>	<b>Dallas 1 room 344</b>
<b>Class Meeting Days &amp; Times:</b>	<b>Thursday 11:30 pm – 2:20 pm</b>
<b>Course Catalog Description:</b>	<b>The purpose of this course is to provide teacher candidates with the subject matter, background, and material organization for an integrated science program in the primary/elementary school. Students experience first-hand the scope and sequence of science education in a primary/elementary/middle school setting.</b>
<b>Recommended Text and References:</b>	<b>Articles will be uploaded on Blackboard as and when required.</b>
<b>You Need:</b>	<b>a google email id and password. We will be using google docs to create the science resource folios. A print out of the science TEKS EC-6 Access to a scanner A positive attitude towards the course activities and field experiences</b>
<b>Access to Learning Resources:</b>	<b>UNT Dallas Library: phone: (972) 780-3625; web: <a href="http://www.unt.edu/unt-dallas/library.htm">http://www.unt.edu/unt-dallas/library.htm</a> UNT Dallas Bookstore: phone: (972) 780-3652; e-mail: <a href="mailto:1012mgr@fhcg.follett.com">1012mgr@fhcg.follett.com</a></b>
<b>Field Experience: This course has a 25 hour field experience component that must be completed with the field experience logs submitted in a timely manner in order to get a grade for the course. 20 hours will be completed at the Perot while 5 hours will be spent observing in an elementary</b>	

<b>science classroom. Failure to complete the field experience will result in failing the class.</b>	
<b>Course Goals or Overview:</b>	
	<p>The goal of this course is provide teacher candidates with the knowledge, skills and dispositions as a basis for making decisions in respect to teaching elementary school science.</p> <p>The knowledge, skills and dispositions developed in this course are delineated in a variety of ways, including student learning outcomes, assessments, assignments, and various course activities. They are also developed in a manner consistent with recommendations of the National Research Council’s National Science Education (NSES) and National Science Teachers Association (NSTA) Standards, requirements of the Texas State Board for Educator Certification (TEKS) and Interstate New Teacher Assessment and Support Consortium (INTASC) standards.</p>
<b>Learning Objectives/Outcomes:</b> At the end of this course, the student will	
1	Be able to demonstrate the use of instructional strategies and teaching activities to teach the science content knowledge included in Texas’ Essential Knowledge and Skills (The TEKS). TEKS
2	Learn to teach science activities or lessons at the elementary level by a variety of approaches (discovery, inquiry, decision-making, and problem solving) and in a variety of grouping arrangements. TEKS, NSES & INTASC standards
3	Develop a deeper understanding and appreciation of the science content covered in K-6 schools.
4	Learn to apply technology to elementary school science by identifying, describing, and using instructional software, Internet and other computer applications than would enhance instruction. TEKS, NSES & INTASC standards
5	Complete classroom observations and related tasks in field-based settings. TEKS, NSES & INTASC standards
6	Plan science activities and lessons and teach them to students in school and field-based settings TEKS, NSES & INTASC standards
7	Use reflective analysis to improve their teaching. TEKS, NSES & INTASC standards

**Course Outline**

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated both verbally in class as well as through Blackboard

**Please Note: assignments include both those completed in class as well as for homework.**

<b>TOPICS</b>	<b>TIMELINE</b>	<b>SLO</b>
Nature of Science and Science Process skills Introduction to Field-Based Experiences and Teaching Science in the Elementary School, examining TEKS, TAKS and NSES standards. Content integration in the EC-6 classroom TEKS: K-6 (a) Nature of Science NSES / NSTA: Standards for Science Teaching EC-6, Chapter 3	Jan 22nd DAST drawing Science process skills  Jan 24 <sup>th</sup> orientation at the Perot  <b>Homework 1 for Jan 29th</b> <b>Complete the 5<sup>th</sup> grade science</b>	1,2,3, & 7

<p><b>Standard 2 – Nature of Science</b>  <b>INTASC: Standard 2 - Student development,</b>  <b>Standard 4- Multiple Instructional Strategies</b>  <b>INTASC: Standard 1 – Content Pedagogy</b></p>	<p><b>STARR test and bring the results to class. Please check BB discussion thread for more directions on this assignment</b></p>	
<p>The Scientific Method, Inquiry-based Science teaching and Learning.  <b>TEKS: K-6 (0.1-0.4) Science Process / Inquiry</b>  <b>NSES / NSTA: Inquiry and the National Science Education Standards</b>  <b>Standard 3 - Inquiry</b>  <b>INTASC: Standard 1 – Content Pedagogy</b></p>	<p>Jan 29th          Scientific method   <b>Orientation reflection due Feb 1<sup>st</sup> on BB. Please refer to the discussion section on BB for prompts for this reflection.</b></p>	<p>1,2,3, &amp; 7</p>
<p>Science Safety in the Elementary Classroom, MSDS sheets, safety contracts  <b>TEKS: K-6 (0.1) The student conducts field and laboratory investigations using safe, environmentally appropriate, and ethical practices.</b>  <b>NSES / NSTA: Safety and School Science Instruction</b>  <b>Standard 9 – Safety &amp; Welfare</b>  <b>INTASC: Standard 6 – Communication &amp; Technology,</b>  <b>Standard 7 - Planning</b></p>	<p>Feb 5th          Safety contract   <b>Feb 10<sup>th</sup> first phase of the science resource folio due on google docs.</b></p>	<p>2, 6 &amp; 7</p>
<p>Constructivism in the Elementary Classroom          Planning and Teaching Science: Activities, Lessons, and Units, 5E model, Hands-on activity, Visual Organizer, Extension activity, Formative and Summative Assessments, Administration and Arts Integration (e.g., scientific illustration, using science trade books [language arts literacy]), dramatic performance [skits/historical science leader role play], and music.  <b>TEKS: K-6 (0.5 – 0.14) Science concepts</b>  <b>NSES /NSTA: Standards for Science Teaching</b>  <b>EC-6 Chapter 3, Standards for Science Content</b>  <b>EC-6 Chapter 6</b>  <b>Standard 5 – General Teaching Strategies</b>  <b>INTASC: Standard 2: Planning</b>  <b>Standard 7- Planning</b></p>	<p>Feb 12th          5E lesson, subject integration   <b>Feb 15<sup>th</sup> Draft of TK 20 section 2, standards 4, 5 and section reflection due on BB.</b></p>	<p>1-7</p>
<p>Feb 19<sup>th</sup> work day. You will work on your cart activities as a group</p>	<p>Dr N is away at a conference   <b>Feb 21<sup>st</sup> P2 reflection due on BB.</b></p>	

	<b>Please refer to the discussion section on BB for prompts for this reflection.</b>	
<p>Scientific inquiry in the elementary class                  Definition, types, examples , expectations of teachers, students                  TEKS: K-6 (0.1-0.4) Science Process / Inquiry                  NSES / NSTA: National Science Education Standards, an overview                  Standard 3 - Inquiry                  NTASC: Standard 2: Planning</p>	<p>Feb 26th                  Scientific inquiry</p> <p>Feb 27<sup>th</sup> the materials list with activity prices and websites for the cart activities will be emailed to Thomas.</p>	1-3,7
<p>Assessment in the Science Classroom                  TeXes, PPR, Content exams                  TEKS: The TEKS and the TAKS tests                  NSES / NSTA: Assessment in Science Education, Chapter 5                  Standard 8 - Assessment                  INTASC: Standard 8 - Assessment</p>	<p>Mar 5th                  Game Day. Test out the Museum game you designed in class. Please bring the game and relevant materials to class to test on your peers.</p> <p><b>Mar 10<sup>th</sup> second phase of the science resource folio due on google docs.</b></p>	1, 6,7
<p>Professional development opportunities for elementary science teachers                  TEKS: K-6 (0.5 – 0.14) Science concepts                  NSES /NSTA: Standards for Professional Development of Teachers of Science, Chapter 4                  Standard 10 – Professional growth                  INTASC: Standard 9 – Reflective Practice, Professional development</p>	Mar 12th	1-3,7
Mar 16 – 22 <sup>nd</sup>	Spring break	
<p>Multicultural Science Education                  TEKS: K – 6 (0.3) Science Process, connect science concepts with the history of science and contributions of scientists                  NSES / NSTA: Diversity and the National Science Education Standard 5 – General skills of teaching                  INTASC: Standard 3 – diverse learners</p>	<p>Mar 26<sup>th</sup></p> <p><b>If Thomas has all the materials, we will have class at the Museum to practice with the cart activity materials. Please bring cart activity documents with you.</b></p> <p><b>March 26<sup>th</sup> P3 reflection due on BB. Please refer to the discussion section on BB for prompts for this reflection.</b></p>	2, 6,7

Content test.	April 2 <sup>nd</sup>  <b>Mock Content test before phase 4 part 2 starts at the Perot. Each group will design a 20 point content test based on the vocabulary for the exhibit hall (Phase 1 of the resource folio) they will administer to the students they are hosting. Students cannot participate in Phase 4 part 2 unless they pass the administered content test.</b>	1-3,7
Use of Models in the elementary science classroom TEKS: K-6 (a) Use of models of objects and events as tools for understanding the natural world and to show how systems work NSES / NSTA: Standards for Science Teaching EC-6 Chapter 3, Standard 5 – General skills of teaching INTASC: Standard 4- Multiple Instructional Strategies	April 9th  <b>April 9<sup>th</sup> third phase of the science resource folio due on google docs.</b>	1-3,7
Controversial issues in science and science teaching TEKS: K-6 (0.4,0.5) Science Process NSES / NSTA: National Science Education Standards, an overview Standard 4 – Issues INTASC: Standard 1: Content Pedagogy Standard 10 – School and community involvement	Apr 15 <sup>th</sup>  <b>April 20<sup>th</sup> P4 reflection on BB</b>	1-3,7
Scientific Literacy, reading and writing science, science notebooks TEKS: K-6 (0.3) Science Process NSES / NSTA: National Science Education Standards, an overview Standard 3 - Inquiry Standard 5 – General skills of teaching INTASC: Standard 1: Content Pedagogy	Apr 23rd Literacy science integration  <b>Draft of Key assignment uploaded to BB/ TK 20</b>	1-3,7
<b>Student resource folio presentations/Content test</b>	<b>Apr 30th</b>	1-3, 5-7
<b>Final Presentations/ Post survey / P5</b>	May 7th	

<b>reflections/ Pot Luck</b>		
<b>All assignments due /submitted / uploaded by May 10<sup>th</sup> 2015, 5pm</b>		

**Perot Museum Schedule:**

Schedule for the Perot spring 15

Phase	Tentative dates for each phase	What you will be doing in each phase	Assignment
P1	Jan 24th	Orientation to the museum, explore exhibit halls, examples of games, cart activities	P1 Reflection due on BB
<b>P2P1</b>	<b>Jan 25<sup>th</sup> – Feb 6th</b>	<b>3 hours. In Hall 1 (Cart activity hall). Jointly work on vocab / teks for resource folio. Shadow a GEP for 2 hours. You will sign up for times provided by the museum.</b>	<b>Feb 10<sup>th</sup> 1<sup>st</sup> installment of the science resource folio on google docs</b>
<b>P2p2</b>	<b>Feb 7<sup>th</sup> – Feb 21st</b>	<b>2 hours. In hall 1. Interact with visitors in hall 1. work on cart activities as a group</b>	<b>P2 Reflection due on BB</b>
Feb 27 <sup>th</sup> the materials list with prices and websites for the cart activities will be emailed to Thomas.			
<b>P3p1</b>	<b>Feb 22<sup>nd</sup> – Mar 7th</b>	<b>Make sure science resource folios are exchanged 3 hours. Explore exhibit hall 2 (game hall) Develop game.</b>	
March 5 <sup>th</sup> Test game out in class. Submit game details in BB in required format and game lesson plan			
<b>P3p2</b>	<b>Mar 8<sup>th</sup> – 24th</b>	<b>3 hours. Play game in exhibit hall 2 with museum visitors</b>	<b>P3 Reflection due on BB</b>
Mar 26 <sup>th</sup> If Thomas has all the materials then have class at the museum, let them test out cart activities			
<b>P4P1</b>	<b>Mar 25<sup>th</sup> – apr 4th</b>	<b>3 hrs. Interact with visitors with the cart activity in hall 1</b>	
<b>P4P2</b>	<b>Apr 4<sup>th</sup> – 20th</b>	<b>Make sure science resource folios are exchanged and cart activity lesson plans as well April 2<sup>nd</sup> students must pass content test before they are allowed to do phase 4 part 2  Students A &amp; B will be in Birds for 2 hours. The first hour A will demo the birds cart activity and B will watch and learn. The second hour B will interact with the museum</b>	

		visitors using the Birds cart activity and A will assist.	
P4P3		Students A & B will be in Dinosaurs for 2 hours. The first hour B will demo the Dino cart activity and A will watch and learn. The second hour A will interact with the museum visitors using the Dino cart activity and B will assist. (so this will be a third hall)	April 20 <sup>th</sup> P4 reflection due on BB
P5	Apr 20 <sup>th</sup> – May 6 <sup>th</sup>	2 hours, in pairs, evaluation of exhibit hall 4 and vice versa.	May 6 <sup>th</sup> final post survey

**Important Note: Dos and Don'ts at the Perot**

DON'T BE LATE. DON'T CHEW GUM. DON'T BE RUDE.  
 DON'T CHANGE THE TIME AND DATE YOU HAVE SCHEDULED YOURSELF FOR. This is important. Your signing up for a particular date or time at the museum is a PROFESSIONAL COMMITMENT. I have to let the museum know when you are coming and if you don't show up that is unprofessional. If you have signed up for a particular time and don't show up, you get zero on those related assignments plus you don't complete the required hours for the class which can fail you. If you are sick please produce a doctor's note. Just saying I am not feeling well won't cut it sorry!  
 DON'T SIGN UP FOR 3 HOURS AND STAY FOR 2. You will sign in and out each time you go to the Perot. I have access to these sign in times and I will check on these randomly.

Remember you are representing Dr. N and UNT Dallas. Be professional, positive, enthusiastic and engaging and always ready to learn.

**Attire to be worn:**

On the Jan 24th: Comfortable shoes, you will be doing a lot of walking, comfortable, professional looking clothes.

For all the Phases: Black pants and a white top/ tee, shirt (no color showing at all), comfortable closed toe shoes

**Parking and entry to the museum** will be free each time you go to the museum for the field experiences for EDEE 4330

**Here is a list of the exhibit Halls you will be in this semester. Please do Not make any changes to this without my approval. If your name is missing let me know.**

**Morning class**

**Exhibit Halls Being Human, Energy, Life then and Now**

Name	Cart activity Hall	Game Hall	Phase 4 Hall	Phase 5 Hall
1 Chavez,Wendy Lourdes	Being Human	Energy	Being Human and Life then and now	Being Human and Discovering Life

2	Dobson,Danika Nicole	Life then and now	Being Human	Life then and now and Energy	Life then and now and dynamic earth
3	Henderson,Deaundra T	Energy	Life then and now	Energy and Being Human	Energy and birds
4	Kilgore,Patricia Ann	Being Human	Energy	Being Human and Life then and now	Being human and dynamic earth
5	Lovato,Chelsea Marie	Life then and now	Being Human	Life then and now and Energy	Life then and now and birds
6	Marquez,Yanira I	Energy	Life then and now	Energy and Being Human	Energy and discovering life
7	Marshall,Earica Danyel	Being Human	Energy	Being Human and Life then and now	Being human and birds
8	Miralda,Monserrat	Life then and now	Being Human	Life then and now and Energy	Life then and now and discovering life
9	Molina,Toni Natalie	Energy	Life then and now	Energy and Being Human	Energy and dynamic earth
10	Ortiz,Maria G	Being Human	Energy	Being Human and Life then and now	Being Human and Discovering Life
11	Puga,Maria Guadalupe	Life then and now	Being Human	Life then and now and Energy	Life then and now and dynamic earth
12	Reames,Kimberly Dawn	Energy	Life then and now	Energy and Being Human	Energy and birds
13	Reed,Cara Jolyn	Being Human	Energy	Being Human and Life then and now	Being human and dynamic earth
14	Solis,Ena Mabel	Life then and now	Being Human	Life then and now and Energy	Life then and now and birds
15	Tavares,Karina	Energy	Life then and now	Energy and Being Human	Energy and discovering life
16	Vendetti,Mary	Being Human	Energy	Being Human and Life then and now	Being human and birds
17	Wade,Lakesha Nicole	Life then and now	Being Human	Life then and now and Energy	Life then and now and discovering life
18	Wine,Annabelle G	Energy	Life then and	Energy and	Energy and



			now	Being Human	dynamic earth
19	Wright,Kiona Trenee	Being Human	Energy	Being Human Life then and now	Being Human and Discovering Life

**Course Evaluation Methods**

The course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course

**Assignments –**

1. Weekly Activities– Readings and other activities that are assigned weekly throughout the semester.
2. Reflection Papers– Reflective writings that serve to integrate your experiences in the classroom and in the field during the semester.
3. Perot museum assignments
4. Science resource folio related assignments
5. Other Assignments

**Assignments and grades:**

Assignment	Brief Description	Points	SLOs	Due date
<b>Museum Related Assignments</b>				
Pre-Survey	A pre survey on survey monkey to be completed before you go to the Museum on the 24th	20	7	Jan 23rd
Post-Survey	A post survey taken before finals on survey monkey	10	1-7	May 7th
P1 reflection	Orientation reflection at the Museum	20	1, 2, 3, 6, 7	Feb 1st
P2 reflection	Reflection after completing P2 at the Museum	10	1, 2, 3, 6, 7	Feb 21st
P3 reflection	Reflection after completing P2 at the Museum	10	1, 2, 3, 6, 7	Mar 26th
P4 reflection	Reflection after completing P2 at the Museum	20	1, 2, 3, 6, 7	April 20th
P5 evaluation	Evaluation after completing P5 at the Museum	10	1, 2, 3, 6, 7	May 7th
Museum Game	Description and lesson plan	20	1, 2, 3, 6, 7	Mar 5th
Museum Cart activity	Description, activity, materials list Cart activity Lesson plan	10	1, 2, 3, 6, 7	Feb 27 <sup>th</sup> Mar 26th
Content test	Content test before P4p2 at the museum	20	3	Apr 2nd
<b>Science resource folio related assignments **</b>				

Phase 1 science folio	Phase 1 of the science resource folio on google docs	100	1-7	Feb 10th
Phase 2 science folio	Phase 2 of the science resource folio on google docs	100	1-7	Mar 10th
Phase 3 science folio	Phase 3 of the science resource folio on google docs	100	1-7	Apr 9th
Student presentation	Students will present their folios in a round robin	10	1-3, 5, 7	April 30th
<b>Other assignments</b>				
5 <sup>th</sup> grade Starr test	Take the 5 <sup>th</sup> grade science STARR test and reflect on how you did	10	1, 3, 7	Jan 29th
TK20 Section 2	Standards 4 & 5 reflections and artifacts, section reflection	20	1, 2, 3, 6, 7	Feb 15th
Key assignment	Upload key assignment narrative and documents to BB	10	1-7	Apr 23rd
<b>Grand total = 500 points</b>				

\*\* Please see last pages of this syllabus for more information on the science resource folio

**Grade Distribution:**

500 – 450 = A  
 449 – 400 = B  
 399 – 350 = C  
 349 – 300 = D  
 Below 299 = F

**Please note: All the assignments are compulsory. All assignments will be submitted to a thread in Blackboard unless mentioned otherwise. I expect you to complete all the assignments in a timely fashion. There will be no substitutions unless I approve of them. Professional development opportunities will be offered; if you are unable to avail of these an alternate assignment will be provided.**

**Class Participation – Expectations**

1. ATTENDANCE - Attend all classes, meetings, etc. arriving on time.
2. PREPARATION - Be prepared to discuss assigned readings and submit assignments according to established deadlines.
3. PARTICIPATION - Contribute constructively and respectfully to all discussions and activities.
4. RESPECT – Do not talk while the teacher or another presenter is speaking.
5. ACADEMIC HONESTY - Know and follow course, departmental, program and university policies on assignments and assessments.
6. PROFESSIONALISM - Know and follow departmental, program and university policies expected of PDS students.
7. Participation and Professionalism – CRITICAL!
  - a. Absences and tardies will count toward final grade reduction: 2 absences = one final grade reduction, 4 absences = two final grade reductions, 5 absences = three grade reduction,

- please make arrangements to retake the class another semester
  - b. Three tardies = 1 absence. (Tardy - must arrive within the first 10 minutes of class)
  - c. Completes assigned readings before coming to class
  - d. Answers questions and participates in class discussions
  - e. Avoid social or unrelated conversation, working on other assignments, using cell phone, checking email, surfing web, playing video games during class time etc.
8. **You are expected to be present in class and on time especially on presentation dates. If you arrive late you will lose 25% of the assigned points.**

## University Policies and Procedures

### Students with Disabilities (ADA Compliance):

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA).

"Any student requesting academic accommodations based on a disability are required to register with Disability Services each semester. A letter of verification for approved accommodations can be obtained from this office. Please be sure the letter is delivered to me as early in the semester as possible. Disability Services is located in DAL 2, Room 204 and is open 8:30-5:00p.m., Monday through Friday. The phone number is (972) 338-1777."

Students' with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. For more information, you may visit the Office of Disability Accommodation/Student Development Office, Suite 115.

### Student Evaluation of Teaching Effectiveness Policy:

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class.

### Assignment Policy:

All assignments are compulsory. There are no exceptions to this rule. Please refer to the assignment expectations document for details about each assignment and its due dates. Late assignments will result in a 5 point reduction for each day late.

If I am not satisfied with an assignment response, I reserve the right to deduct points and return it to you so you may improve on it and resubmit to get some of the deducted points back if the work is deemed satisfactory. **All assignments are due by 5pm May 10<sup>th</sup> 2015** after which **NO** assignments will be accepted or graded.

### Exam Policy:

Exams should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Student Handbook).

### Academic Integrity:

Narayan EDEE 4330 spring 2015 section 090

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of conduct and Academic Dishonesty policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Conduct at [http://www.unt.edu/csr/student\\_conduct/index.html](http://www.unt.edu/csr/student_conduct/index.html) for complete provisions of this code.

Please take the time to go through this link. If I find you have plagiarized from any source without giving them due credit I will give you a zero for that assignment.

**Bad Weather Policy:**

On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website [www.unt.edu/dallas](http://www.unt.edu/dallas). Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

**Attendance and Participation Policy:**

The University attendance policy is in effect for this course. Class attendance and participation is expected because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. **Students are responsible to notify the instructor if they are missing class and for what reason. If I have not heard from you and receive supporting documentation for your absence, I shall consider it an unexplained absence. Two such absences will reduce your overall grade by a letter grade irrespective of the points you might make. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent. If you have missed a class, please make an appointment to meet me so we can determine what needs to be done to make up the lost time. If you are absent on a presentation day you will get zero points for that assignment.**

**Diversity/Tolerance Policy:**

Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Center for Student Rights and Responsibilities as the instructor deems appropriate.

**Optional Policies:**

***Use of WebCT/Blackboard***

I will expect you to use Blackboard to upload your reflection papers and I will give you feedback on those on Blackboard. Please monitor these for additional comments I give or information I require.

***Use of Cell Phones & other Electronic Gadgets in the Classroom***

Please do not use your cell phones in class. If it is an emergency, I will permit you to leave class and take the call. **If I see you texting or playing videogames or checking your email in class I will drop you a letter grade.**

Narayan EDEE 4330 spring 2015 section 090

**Food & Drink in the Classroom**

I do not mind food and drink in the classroom, however when we are conducting an activity, I will expect all food and drink to be put away immediately. All food and drinks must be properly disposed of.

**Use of Laptops**

If I need you to use a laptop during class I will take you to the computer lab.

**Grade of Incomplete, "I"**

A grade of incomplete, "I" will be given only under extenuating circumstances.

**Science Resource Folio**

You will use the format provided to create science resource folios in groups and individually. A science resource folio is a collection of pages with relevant information on them. Each page will revolve around a particular concept providing a drawing / picture, meaning of the word, word in Spanish, TEKS, stem and everyday life application pictures, an activity for the concept etc. Please see Force example.

The science resource folio will be created in different phases with different groups and we will merge them at the end. The purpose is to make sure all students get familiar with different science concepts and vocabulary terms related to the museum and to the EC-6 generalist, so it will help you study for the generalist exam and serve as a resource when you teach.

You will be divided into 6 groups according to the cart activity groups and you will use google docs to work collectively and individually on your group folio throughout the semester

<b>Being Human</b>	<b>Life then and Now</b>	<b>Energy</b>	<b>Discovering Life</b>	<b>Dynamic Earth</b>	<b>Birds</b>
Wendy Chavez	Danika Dobson	Deaundra henderson	Arlette Aguayo	Maria banda	Cantu,Concepcion
Patricia Kilgore	Chelsea Lovato	Yanira marquez	Amanda Coleman	Claudia Cruz	Manuela Diaz castro
Earica marshall	Miralda Monseratt	Toni Molina	Renae Elder	Monica McDaniel	Mejia,Franklin
Maria ortiz	Maria Puga	Kimberley Reames	Beatriz Richards	Missar Sanguino	Daisy Sarinana
Cara Reed	Ena Sollis	Karina Tavares	Marlen Torreblanca	Esther Vasquez	Zapata,Adelaida Marlen
Mary vendetti	Lakesha Wade	Anabel Wine	Abraham R		
Kiona Wright					

**Phase 1 of the Science resource folio:**

This will correlate to Phase 2 of the Perot Museum field experience. Explore the exhibit Hall you are assigned to. You will take your TEKS science EC-6 with you. I want a vocabulary list of 25 important science vocabulary terms relevant to the exhibit hall and to the EC-6 TEKS and EC-6 generalist. I want the terms to be distinct and not overlap. You can work on this with a partner. You will create individual pages on google docs for each term using the format provided.

In addition to the 25 terms I want each student to pick 1 new term related to any of the 25 terms and create an individual page for that term. So each student will have 5-6 terms they are responsible for. The format asks for you to draw your understanding of the term or concept. Please make sure your drawing is clear and representative of your thoughts on the concept. Of the 6 terms you can draw 3 and ask a child you know to draw the other three.

Please make sure you use the same format throughout and alphabetize the document.

The completed Phase 1 of the science folio is due on Feb 10<sup>th</sup>.

**Consequences for late submission: All the members of the group lose 10 points a day. The individual responsible for the late submission loses 10 points per missing word and drops a letter grade regardless of their total score at the end.**

**Phase 2 of the Science resource folio:**

For this section you will work in pairs. You will locate the new EC-6 generalist preparation manual uploaded to the content section of BB. Your task for the next three phases lies on pages 45 from Competency 007 to page 49 Competency 018. For this phase, among the pairs, (assuming there are three pairs), one pair will pick 10 vocabulary words / concepts from Physical science (concepts 007-010), a second pair will pick 10 vocabulary words / concepts from Life Science (concepts 011 – 014), while a third pair will pick 10 vocabulary words / concepts from Earth and Space Science (concepts 015 – 018) and enter them in your resource folio following the same format as in the earlier phase. Please keep the three sections separate, yet alphabetize the concepts in each section. Please make sure these are terms that have not appeared in the folio before.

The completed Phase 2 of the science folio is due on March 10<sup>th</sup>.

**Consequences for late submission: All the members of the group lose 10 points a day. The individual responsible for the late submission loses 10 points per missing word and drops a letter grade regardless of their total score at the end. If you have already been dropped a letter grade for phase 1, you will drop a second letter grade for phase 2 being late regardless of your total at the end.**

**Part 3 of the resource folio:**

For this section you will work in pairs. You will locate the new EC-6 generalist preparation manual uploaded to the content section of BB. Your task for the next three phases lies on pages 45 from Competency 007 to page 49 Competency 018 or from the EC-6 generalist or Starr tests. Each pair will pick 5 words each from remaining two sections that they did not do in phase 2 of this project. For instance if you did Physical science in phase 2 in phase 3 you will do 5 words from earth science and 5 from life science. Again there must be NO replications. Due date Apr 9th

**Consequences for late submission: All the members of the group lose 10 points a day. The individual responsible for the late submission loses 10 points per missing word and drops a letter grade regardless of their total score at the end. If you have already been dropped a letter grade for phase 1, you will drop a second letter grade for phase 2 being late regardless of your total at the end.**

**Here is a sample of what I am expecting for the term force!**

**Science Concept:** Force

**Spanish:** Fuerza

**Comment [O1]:** I want this to be a single vocabulary term

**Comment [O2]:** Translate to spanish

Draw what you think the term force means here  
(this will be your drawing or that of a child that you can scan in here.) Describe what you have drawn.

**My understanding of the term:** it is some kind of pull or push, power

**Comment [O3]:** You define what the word means to you, in your own words

**Definition:** A **force** is a push or pull upon an object resulting from the object's *interaction* with another object. Whenever there is an *interaction* between two objects, there is a force upon each of the objects. When the *interaction* ceases, the two objects no longer experience the force. Forces only exist as a result of an interaction. Interaction means how one object affects the other

**Comment [O4]:** The scientific definition of the vocabulary word

**Source of definition:** <http://www.physicsclassroom.com/class/newtlaws/Lesson-2/The-Meaning-of-Force>

**Comment [O5]:** Where you got the definition from

**Units:** It is measured in the SI unit of Newtons and represented by the symbol **F**.

**Comment [O6]:** Units of measurement where relevant

**Formula:**  $F = m \times a$  where  $m$  = mass and  $a$  = acceleration

**Comment [O7]:** Formula where relevant

**Related terms:** mass, acceleration, newton, balanced and unbalanced forces, Newton's Laws, inertia, gravitational force

**Comment [O8]:** At least 5 related terms

**Comment [O9]:** These terms can also come from the TEXES prep manual for the EC=6 generalist

**TEKS:** 6 (A,B,C,D)

**Comment [O10]:** Relevant TEKS

**Competency:** Competency 007 (Forces and Motion): The teacher understands forces and motion and their relationships.

**Comment [O11]:** Comes from the prep manual for the EC-6 generalist [http://cms.texas-ets.org/files/5914/1881/7139/core\\_subjects\\_ec\\_6\\_291.pdf](http://cms.texas-ets.org/files/5914/1881/7139/core_subjects_ec_6_291.pdf)

**Lesson plan with activity:** <http://www.discoveryeducation.com/teachers/free-lesson-plans/rules-of-forces-and-motion.cfm>. The activity involves toy cars and ramps and discussing the effects of gravity and friction

**Comment [O12]:** Lesson plan with an activity based on the vocab concept. Paste the link to the lesson plan. Describe briefly what the activity is

**You tube video:** <https://www.youtube.com/watch?v=2OJbztWitk>

**Comment [O13]:** This can be a song, rap, video about the topic

**Question from the Generalist or Starr test:**

An object is being acted on by a force of 20 N directed to the left and a force of 30 N directed to the right. What is the net force acting on the object?

- A. 10 N to the left
- B. 50 N to the left
- C. 10 N to the right

**Comment [O14]:** If this isn't available then you can replace it with common misconceptions about the topic or something else



D. 50 N to the right

**Relation to everyday life:**

**Picture 1:** What am I looking at: Children in a tug of war trying to pull the rope towards them. Force = pull, also friction



**Comment [O15]:** Picture of how the concept is related to everyday life with a description of how it is relevant

**Comment [O16]:** The picture must be of good quality, must not be grainy or unclear

**Source:** [http://www.fourseasonsamusements.com/assets/root/categories/Photo%20Opp%20and%20Other/tug\\_of\\_war.jpg](http://www.fourseasonsamusements.com/assets/root/categories/Photo%20Opp%20and%20Other/tug_of_war.jpg)

**Comment [O17]:** Where did you get the picture from?

**Picture 2: STEM application.** What am I looking at: Parachute drifting towards the earth because of the earth's gravitational force, the broad chute slows down its descent.

**Comment [O18]:** How is this related to a STEM application. Describe in a line or two



Source: <http://www.planetstillalive.com/wp-content/uploads/2011/12/Parachute-AcrobaticsA-7-1024x689.jpg>

**Comment [O19]:** Source of the picture

Prepared by: xxxxxxx and date

**Comment [O20]:** Your name and that of your partner goes here and the date you completed it.