



Series: Discovering Your Educational Community Resources

Amazing Space and Science; Astronomy & More Pennsylvania

EDUO 9807 1 Semester Credit/Unit

Instructor – Tina Romano

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Syllabus

Course Description

Teachers will have the opportunity to learn about educational resources available to them and their students at a nearby planetarium. After exploring the basic principles of physics and astronomy by participating in hands-on interactive exhibits and star-gazing through telescopes, the teacher will be able to see how the experiences can be transformed into classroom learning activities.

Course Objectives

Teachers will:

1. Visit a planetarium museum, a science or space museum (or a museum that has a science or space section), and an observatory.
2. Research information about each site before visiting.
3. Conduct further research after each site visit.
4. Acquire information through research about astronomy.
5. Acquire information from the visits and the research to determine if:
 - a. the sites are worthy of a student field trip
 - b. classroom lessons can be developed from the experience.

6. Evaluate the experience as to its relevance for an educator.

Grading Rubric: Written Response Rubric

Exemplary: Met or Exceeds Expectations A+ to A-	Acceptable: Meets Expectations B+ to B-	Unacceptable: Needs Improvement. Must be resubmitted.
Reflective, thoughtful ideas relevant to the assignment are clearly stated.	Presents some relevant ideas and connections to the assignment.	Few relevant ideas connected to the assignment, some ideas unclear.
Very well organized	Is generally well organized	Shows little organization
Reflective piece covers numerous facts and specific details of the learning experience	Some facts and specific details of the learning experience are included.	Few or no facts or specific details of the learning experience are included.
Free of Spelling or grammatical errors	Writing contains a few spelling or grammatical errors.	Numerous spelling or grammatical errors. Writing is difficult to read.

Instructions for coursework submission:

Written Assignments

Your coursework should be created in a document that can be emailed directly to the instructor. Coursework should be typed, double-spaced with size 12 font. Reflection write-ups should be one or more pages in length and address every question in the coursework. Pictures and documents may be scanned and posted along with your Word or PDF file of written assignments. Label everything carefully with the assignment number and make sure that your name and email address are easy to locate. Visit four sites and submit responses for EACH location.

IMPORTANT - Camera images can be very large files. Save the images in lower definition resolution in order to keep document file sizes down for emailing.
For assistance email jherz@dominicancaonline.com

EMAIL your completed documents to the instructor's email listed on the syllabus you are working from.

Written Assignments

1. Give the name and address of each of following visited places:

- a. Planetarium museum - Attendance at a program presentation is required.
 - b. Science or space museum or a museum that has a science or space section - Studying astronomy and physics exhibits are required.
 - c. Observatory - Participating in star gazing is the activity at the observatory
- Visit all three sites and submit these responses for EACH location.
 - Your coursework should be created in a document that can be posted online in the Pennsylvania DROPBOX, which is found on your Moodle course page. You will find the instructions at the bottom of this syllabus.

PART ONE – The venue

You may choose a site which is not listed on the websites below. However, no site may be visited that was used for another of the “Discovering Our Community Educational Resources” classes.

Click on the websites below –and look for venues in your area.

- <http://www.go-astronomy.com/planetariums-state.php?State=PA>
- <http://classicaliners.tripod.com/museums.html>
- <https://maps.google.com/maps/ms?ie=UTF8&oe=UTF8&msa=0&msid=217493103495941267423.00048c263030e8c451d9b>
- <http://www.go-astronomy.com/observatories-state.php?State=PA> <http://www2.fi.edu>

PART TWO – Evidence of your visit

SUBMIT PICTURES OF YOURSELF

1. in front of the entrance of the venue with its name or any other recognizable landmark visible.

2. examining displays and exhibits.
3. with an employee or volunteer from the venue.
4. with your entrance ticket to the venue and/or pamphlets, brochures or any other information obtained from the site.

PART THREE – Research

To prepare for your visit you will conduct research. Your visit will spark interest that will require additional research.

6. Identify your research source(s) used before the visit. – websites/ books/ newsprint/ other sources

The following websites can give you further information about astronomy

- <http://nightsky.jpl.nasa.gov/>
- http://www.sciencedaily.com/news/space_time/astronomy/
- <http://www.astronomy.com/>
- <http://www.skyandtelescope.com/>
- <http://www.kidsastronomy.com/>

7. List the research resources used subsequent to the visit.

PART FOUR - Knowledge

What did you learn from:

8. your research prior to the visit?
9. your research subsequent to the visit?

10. the visit?
11. the person who is with you in #4?

PART FIVE – Process

12. Can the site be usable for a classroom field trip - Why/ or why not?
13. List all of the information that you uncovered at the site and in your research that you could use in a class lesson.
14. How will it be used?

PART SIX – Evaluation

15. Summarize and evaluate your experience visiting and researching this site as to its value for an educator.

Optional

Do you have suggestions that would improve the experience?

Would you recommend this class to other teachers? Why/why not