

NYSSA

1991

HILO

KUSHI

G.H. BALAZS

With
Many
Thanks

Received
1/16/92

AMERICAN GREETINGS
+ ALTY 1-5A +
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with a creature who lives
in an entirely different
world. Few will have
such an opportunity -- thank
you for sharing this
experience with me. I'll
let you know how this
turns out, and if I need
any more specimens, I'll
contact you. Thanks!

Sincerely,
Nysan
Kushi

Dear Mr. Balazs,
Thank you for sending
the turtle stomach and
intestinal tract. I really
appreciate all the time and
effort you've used to help
me with my project!
There are very few people
who would so graciously
volunteer to share their
knowledge with high school
students like me. It was
such a learning experience,
--to be there at Punaluu!
It's something I'll never
forget -- wow! I got to
tag a sea turtle, and
actually, come in contact

~~959-9541~~
959-9541

630 Iwalani Street

Hilo, HI 96720

July 28, 1991

Mr. George Balazs
National Marine Fisheries Service
Southwest Fisheries Center Honolulu Laboratory
2570 Dole Street
Honolulu, Hawaii 96822-2396

Dear Mr. Balazs:

Hello! My name is Nyssa Kushi, and I am currently an upcoming senior in Waialakea High School on the Big Island. This school year I will be enrolled in a Directed Studies course which requires me to do a year-round science project. I am interested in doing a project on Hawaiian Sea Turtles, knowing of the tumors that have been found, and would like to know if there are any possibilities for me to research. I would appreciate it if you would complete the enclosed form and send me any comments you think would be beneficial.

The project also requires that we secure a mentor to guide us through the data process. Would you be my mentor? Although there is some distance between us, my science teacher says it is possible for us to communicate by phone, fax, or E-mail.

Thank you very much for your time and effort, I greatly appreciate it, and am looking forward to hearing from you soon.

Sincerely,

Nyssa C. Kushi

Nyssa C. Kushi

①

10 Mr. WAINZS

From: Nyssa Kushi (959-9541)

TITLE "DIRECTED STUDY" (SCIENCE)

JAMIE NEKOBA

DESCRIPTION

School- 935-5235 968-6191 home

Directed Study is a course designed for students who wish to conduct independent research. The students will be able to participate in various science competitions which involve such research.

OBJECTIVES

630 Iwacani St.
Hilo, HI
96720

The objectives of Directed Study (Science) are:

1. Develop scientific inquiry skills through application in a research situation, in conjunction with resource persons from the professional community.
2. Provide opportunities for indepth research studies including the learning of skills in literature research, experimentation and communication.
3. Provide an opportunity for the student to identify moral issues associated with his chosen topic and to express and defend his position on these issues.

The following scientific method will be completed by each student:

1. Select a topic on which to do indepth library and laboratory research.
2. Search all available reading materials in the Waiakae High Library and the University of Hawaii at Hilo Library on the topic chosen.
3. Write a 6 - 8 page typewritten (double-spaced) background research report of the subject you will do an experiment on.
4. Write a protocol for experiment procedures.
5. Keep a daily laboratory notebook and turn in weekly reports.
6. Conduct the designed experiment.
7. Write a formal scientific paper to accompany your experiment in fair competition.

There will be many deadlines for written material to be turned in to me. All written material should be typed, double-spaced, and on the front side only.

EVALUATION

GRADES - Each student will begin with 100 points at the start of each quarter. To maintain the 100 points you must:

1. Meet all deadlines including rewritten material.
2. Turn in background information by mid-quarter (first quarter only), typed and referenced.
3. Be present everyday ON TIME.
4. Turn in weekly lab notebook reports / journals every Thursday. (photocopy lab notes)
5. Turn in summary of a research article every Thursday. (article must be specific to your area of research)

Every deadline that you miss deducts 3 points from 100. Each absence counts as one point.

You will also be letter graded on oral presentations, and on each of the 4 major class projects.

--A hard-bound lab notebook is required of all students for the Experimental Research project. The lab notebook must list in detail everything you do daily and must be written down as you do them. Write on the right hand side of the page only (these pages should be numbered). A copy of weekly data is to be turned in every Thursday.

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Directed Studies - Summary of Projects

There are 4 major projects that you will be responsible for this year. The projects are:

1. Experimental Research Project

This is the major project for this course. It is the laboratory research project that you will enter for competition in the School and State science fairs. The project will enable you to utilize the scientific method of report findings. There will be numerous deadlines to meet with a cut-off point at which to compile data with results and conclusions.

2. Supplemental Proposal

3. 4th Quarter Project

Select one of the following:

- a. A student may select a display project that he/she would like to work on. This may be something of personal interest or something that may enhance a science classroom.
- b. A student may develop a product that best illustrates his/her innovativeness towards improving a societal or local problem.
(e.g. environmental, energy, coastal dev., etc.)

4. "Teaching Science"

An assignment for the 4th quarter to transfer what you have learned this year to others, either by way of a videotape or an oral presentation. The topic may be of your research project or maybe a laboratory technique that you have used during experimentation. Your audience may be other science classes or even to an elementary or intermediate level class.

Directed Studies - DeadlinesIMPORTANT DEADLINES TO MEET

Sept. 9-19 1. Decide on research topic
 2. Begin making contact with research
 3. Formulate hypothesis

Oct. 10 Turn in background research

Oct. 14-18 Protocol of experimental procedures

* Oct. 21 Starting date of experimental research

Oct. 21 - Oct. 31 Oral presentation to class

Dec. 2 Decision on 4th Quarter Project

Dec. 10 Formal introduction of research report
 due

Jan. 16 First draft - Research project report
 (negotiable)

Feb. 7 Final draft - Research Project Report

* Feb. 15-19 Tentative District Science Fair

Apr. 5 (Sun.) Display for State fair
 competition (State science fair
 participants only)

Apr. 7-11 34th Hawaiian Science and Engineering
 Fair

May 4-21 "Teaching Science"

May 25-29 4th Quarter Project due

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SUMMER ASSIGNMENT SHEET FOR DIRECTED STUDIES-SCIENCE STUDENTS

- Objectives:
- * To keep a record of what you have done to explore topics/problems/questions you may later wish to research in greater depth.
 - * To help you focus your ideas and thereby help you define your topics/problems/questions.

Procedures:

1. Conduct an activity. (Read a book/scientific article. See a film or program. Listen to a speaker. Visit a museum or public display. Interview a scientist from the professional community.)
2. Write an entry reacting to the activity. Includes:
 - a. The date.
 - b. The time and location if the activity involved something heard or viewed.
 - c. Bibliographic information if you read something.
 - d. A summary of the activity (What was the main point of the article/book was, etc.) Simply list the highlights; keep copies of the original material in another section of this notebook or use index cards.
 - e. List 1 - 3 questions that you had while doing the activity. What did the activity make you think about?
 - f. Pick one of the questions. What are some ways of answering the questions? (What are possible answers to the questions and how would you find out the answers?)
3. Complete a total of four activities. Evaluation will be conducted at start of 1991-92 school year.

Jamie Nakaba

PLEASE CALL ME AT 968-6198 IF YOU HAVE ANY QUESTIONS.

HAPPY RESEARCH TOPIC HUNTING!

Waiakea High School : 935-5235

Thank you Mr. Balazs!

① Dead turtles - Tissues, Tumors,
leeches, barnacles
Can be shipped
Bones -
Skeleton
- parasites -

② Skeletal Chronological /
Section and stain
Save all ^{humerus} bones from Necropsy

③ Food Sources - Stomachs
analyze and press for
display

④ Tissue for toxicology

⑤ Collaborate w/ KATAHIRA
Describe and analyze
nesting sites, - Hawksbill /

⑥ Feces analyses

⑦ Behavioral observations AT PUNALUU

⑧ blood

⑨ computer entry
and analyses

⑩ Waikiki observing
(continue Russ)