

**2008 Chemistry Instructor**  
**Four Corners Upward Bound Math and Science Academy (Four Corners)**

Contact: [Terry.Hubbard@nau.edu](mailto:Terry.Hubbard@nau.edu) 523-1315.

**Application and Employment Timeline:**

1. Application **Deadline:** February 28, 2008 University Union Room 240 to Terry Hubbard's Mailbox by 1:00 PM
2. All offers will be contingent upon clear background check and FBI fingerprint
3. **Orientation (Required):** Tues May 28th, 6:00 AM – 9:00 PM Modern Languages, Babbitt Academic Annex Room 113
4. **Employment dates:** June 6 – June 30, 2008, ~20 hours per week for 4 weeks
5. **Hours:** Meetings: 7:25 AM – 8:00 daily Teaching 8:15– 11:15 AM Daily **except:**
  - a) Fri. June 6<sup>th</sup> 8:30 – 11:00 Bio 238 or Bio 413 take your students to the chemistry classroom and laboratory to introduce them to the new smells and what a fun place a lab is for work.
  - b) Fri. June 20<sup>th</sup> No Class (to create a three day weekend)
  - c) Wed. July 2<sup>nd</sup> teach 12:30 – 4:00 PM Research Conference instead of AM class
6. July 8<sup>th</sup> 5:00 PM Deadline to e-mail student grades to [Terry.Hubbard@nau.edu](mailto:Terry.Hubbard@nau.edu), you may submit earlier.

**Salary: \$1,408**

**Qualifications:**

- Applicants must be able to obtain permission and documentation from John Nauman to access lab/lecture facilities to teach chemistry at NAU to students attending rural high schools in Arizona, New Mexico, and Utah.
- Applicant possesses life experiences that include an ability to relate with students from diverse family backgrounds (low-income/first generation to complete college degree)
- Classroom management skills a plus!

**Responsibilities:**

- Teach ~19 high school students basic chemistry skills including dimensional analysis: which means making sure students always label the numbers in the calculations that the Chemistry Instructor assigns with the appropriate units and that the Chemistry Instructor shows how knowing these units will help the students decide whether they need to multiply or divide).
- Meet the ~19 students, on June 8<sup>th</sup>, and show them a 10 minute demonstration or hands-on activity to excite them about being in your chemistry class.
- Create a list of lectures and labs you plan to present. Plan on using class time for student's homework to show them how you and professors will expect them to study outside of class. Teach study skills and require students to use them for your quizzes. You may dismiss faster students earlier to allow time to assist students who need more assistance.
- Participate in staff orientation May 29<sup>th</sup> 6:00 AM –9:00 PM Modern Languages, Babbitt Academic Annex Room 113

- Take attendance at 8:15 AM daily and follow up on missing students immediately with Residence Hall Desk assistant (523-2571) to ensure 100% perfect attendance (unless a student has an excused absence approved by the Four Corners Director)
- Teach students to calculate and know their grade as a percent
- Verify student grade calculations are correct and sign grade checks last teaching day of each week
- Teach students how to create a poster of an experiment with a control and display it on a poster board, at least at the level expected for a high school science fair. Prepare a 5 minute slide show of students having fun with each other in the chemistry lab.
- Other duties as assigned

The Chemistry Instructor's role is to excite high school students to look forward to taking chemistry in college and to ensure they will seek assistance to strengthen their skills. The Chemistry Instructor will develop a pre and post test and lectures, labs, quizzes, and lab notebooks to help ~19 students from rural high schools in Arizona, New Mexico, and Utah and who have just completed their junior year in high school to develop strong skills in Chemistry to allow them to be on par with students from urban schools whose parents have bachelor's degrees.

The Chemistry taught should help these students become excited about how it feels to enjoy chemistry in a university setting. University Chemistry will be new for these students therefore the applicant for this Instructor position is encouraged to plan on teaching simple chemistry lectures and labs that would be useful in high school and college and that are fun. For example teaching dimensional analysis to show students how knowing the label or unit for numbers in equations would help them in chemistry, physics, and math. Teaching a simple lab that allows teaching students proper lab technique over which they can be tested and that is appropriate to their level, based on the pre-test will help students see their ability to be successful will result in fun for both the Instructor and the students. If the Instructor has a favorite lab from earlier years this would be the one to choose.

Students are interested in the TV show CSI if you could teach them how to determine a chemical unknown, for example, and relate it to detective work you would be creating a very fun class. Also remember that non-science majors often find science buildings seem to smell funny to them. Some students find science buildings to feel intimidating and scary so having a good time and learning skills that can be used in everyday life like knowing how to follow directions that require being careful and how to memorize information that will be tested would be important guidelines to follow when developing your pre and post test, your lectures, and your labs.

### **Application Components:**

Part 1:

- Application Form and completed Essay
- Resume
- "Lab space and equipment authorization form" signed by John Nauman
- Release and Authorization (Background Check) form and employment list

Conviction Disclosure Form

## Chemistry Instructor Schedule

### Deadline

- Wed. May 29**      **Orientation 6:00 AM – 9:00 PM Modern Languages  
Babbitt Academic Annex Room 113**
- Fri. June 6**      **Demonstrate how Chemistry can be fun so the ~19  
students are happy they are in your class.**
- Mon. June 9**      **Meet your students at 7:45 AM in front of Cowden  
Residence Hall. Get to know your students. Required:  
Take a fun digital picture of your group, preferably with  
yourself, for the DVD, slide show and awards. Preview  
grading criteria with students (No access to computer  
lab) Download your groups picture in the 4C Office  
Research Instructor folder.**
- Fri. June 20**      **No Class. (Dorm closes for a 3 day weekend)**
- Fri. June 27**      **8:15 – 11:30 Chemistry Lab Practicum & Final**
- Mon. June 30**      **By appointment in Wettaw: Practice Research Poster  
Session all lab write ups in lab notebooks need to be  
complete and included with the poster presentation.**
- Tues. July 1**      **8:15 – 11:30 Practice improving presentation in own  
classroom.**
- Wed. July 2**      **12:30 – 4:00 Poster Session and Slides Wettaw**
- Tues. July 8**      **1:30 PM Last day to submit final grades with supporting  
documents to [Terry.Hubbard@nau.edu](mailto:Terry.Hubbard@nau.edu) or in her mailbox in  
University Union Room 240.**



## Lab Space and Equipment Authorization Form

I agree to provide lab space and equipment for \_\_\_\_\_ high school students to be  
(number )  
used under the supervision of \_\_\_\_\_. This agreement is  
(Name of Science Instructor)  
valid between June 9 and July 2, 2008.

Authorized by \_\_\_\_\_  
(Faculty Member – Print, Sign, and Date)

Additional Comments:

**EMPLOYMENT BACKGROUND INVESTIGATION AUTHORIZATION**

I. I understand that an investigative report may be generated on me that may include information as to

my character, work habits, performance and experience, along with reasons for termination of past employment, financial/credit history, criminal history records from any criminal justice agency in any or all federal, state, city and county jurisdictions, state Department of Motor Vehicle/Drivers' License Records to include traffic citations and registration, military records from the National Personnel Record Center, education records including transcripts, and requests for records and information from any individual, company, firm corporation, present and/or past employers and public agencies (including the Social Security Administration and the Immigration & Naturalization Service). I fully understand that Northern Arizona University and /or their agent American Background Information Services, Inc., may be requesting information from public and private sources about any of the information noted earlier in this paragraph, and I freely give my consent for Northern Arizona University and American Background Information Services, Inc. to do so.

II. According to the Fair Credit Reporting Act (FCRA), I am entitled to know if the considerations for which I am applying are denied because of information obtained from a consumer-reporting agency. If so, I will be notified and be given the name of the agency providing that report.

III. I agree that a photocopy or telephonic facsimile of this authorization shall be valid as the original. This release is valid for most federal, state and county agencies.

IV. I hereby authorize, without reservation, any one contacted by Northern Arizona University and /or their agent American Background Information Services Inc., to furnish the information described in Section 1.

V. I hereby authorize, without reservation, Northern Arizona University and / or their agent, American Background Information Services Inc., to contact my present employer for employment verification/references.

**APPLICANT: COMPLETE THE FOLLOWING:**

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Today's Date**

\_\_\_\_\_  
**Please print full name**

The following information is required by law enforcement agencies and other positive identification purposes when checking public records. It is confidential and will not be used for any other purposes.

\_\_\_\_\_  
**Please print other names you have used**

\_\_\_\_\_  
**Social Security Number**

Supplying your Social Security Number is optional.

Your Social Security Number will only be used in order to confirm your identity for purposes of completing an accurate background investigation.

**Date of Birth** - The Age Discrimination in Employment Act of 1967 and the Arizona Civil Rights Act prohibit discrimination on the basis of age with respect to individuals who are at least 40 years of age. Your date of birth is required on this form in order to confirm your identity for purposes of completing an accurate background investigation, and is not provided to the hiring official for any purpose in connection with consideration of your application for employment.

\_\_\_\_\_  
**Home Address**

\_\_\_\_\_  
**City**

\_\_\_\_\_  
**State**

\_\_\_\_\_  
**Zip**

\_\_\_\_\_  
**Driver's License Number and State**

\_\_\_\_\_  
**Name as it appears on License**

Have you ever been convicted of, plead guilty, or "no contest" to a crime that has or has not been expunged or removed from your record?  No  Yes If yes, please explain:

\_\_\_\_\_  
\_\_\_\_\_  
(The University will consider the nature of the offense, relation to the position for which you are applying, time since conviction, and all other relevant facts and circumstances in determining whether or not to disqualify you from consideration.)

**FAIR CREDIT REPORTING ACT, DRIVER'S PRIVACY PROTECTION ACT, and ANY APPLICABLE STATE STATUE (S) NOTICE:**

In accordance with the Fair Credit Reporting Act, this information may only be used to verify a statement(s) made by an individual in conjunction with legitimate business needs. The depth of information available varies from state to state. The report that will be generated for employment purposes only and in compliance with the Fair Credit Reporting Act, the Driver's Protection Act, and any applicable state statue(s).

09/02/05



**International Home Addresses**

International Residence – If the candidate has worked or attended school outside of the U.S. within the past 7 years, American Background will need to complete an international criminal check. To complete this check, you will need to include the candidate’s home address(es) for each international location. Please fax this information to American Background during the initiation of the check.

**Name of Candidate:** \_\_\_\_\_

International Employment

Location: \_\_\_\_\_

Dates at Location: \_\_\_\_\_

Physical Home Address (not P.O.

Box or APO/FPO): \_\_\_\_\_

City: \_\_\_\_\_

Country: \_\_\_\_\_

International Employment

Location: \_\_\_\_\_

Dates at Location: \_\_\_\_\_

Physical Home Address (not P.O.

Box or APO/FPO): \_\_\_\_\_

City: \_\_\_\_\_

Country: \_\_\_\_\_

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Location: \_\_\_\_\_

Dates at Location: \_\_\_\_\_

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City: \_\_\_\_\_

Country: \_\_\_\_\_