

2009 Research Instructor
(Science, Engineering, Computer Technology, Math)
Four Corners Upward Bound Math and Science Academy (Four Corners)
(4 Research Instructor positions available)

Contact: Terry.Hubbard@nau.edu 523-1315 to determine relevant fields of expertise.

Application and Employment Timeline:

1. **Application Deadline:** March 23, 2009 University Union Room 240 to Terry Hubbard's Mailbox 4:00 PM
2. All positions offered will be contingent upon clear background check and FBI fingerprint
3. **Orientation (Required):** Tues May 26th, 9:00 AM - Noon, Univ. Union Learning Asst. Center, Rm 254i, Science Tutoring Lab
4. **Employment dates:** June 5 – July 1, 2009, ~20 hours per week for 4 weeks
5. **Hours:** Meetings and Teaching hours: 7:45 AM – 11:45 Daily
6. Exceptions:
 - o Fri. June 5th 8:30 – 11:00 Bio 256 advertise project to about 45 students
 - o Fri. June 19th No Class (to create a long weekend for ourselves)
 - o Wed. July 1st teach 12:30 – 5 PM Research Conference & Student Recognition
7. Optional: Thursday Student Graduation & Reception 9:00 – 12:30 RSVP to attend reception
8. Deadline to e-mail student grades to Terry.Hubbard@nau.edu July 2nd 5:00 PM

Salary: \$1,431

The Research Instructor's role is to excite high school students to pursue technical careers that require at least a bachelor's degree in a field that requires math, engineering, science, or computers. The Research Instructor is expected to measure students' technical reading skills and excite them to want to read about experiments that help us understand how things really work. The Research Instructor will teach students the methods scientists use to determine how things work, using the scientific method changing only one variable at a time and measuring their results against a control, when appropriate. The Instructor will teach students how to write a technical college level report and display their results on a high school science fair poster board. Instructors will also take students on a tour of the college level posters in the science building and have them evaluate posters made by professionals for NAU's Enrollment Management and Student Affairs Evaluation Fair.

Project plans should be based on a college science lab or part of a class the Research Instructor has taken. By June 26th each Research Instructor's group will need to have completed a science fair poster and each individual student will need to have completed a college level science research paper and the group needs to have completed a power point to demonstrate the fun of conducting science research. The Instructor will be required to take close-up fun photos of students in the group, being sure to capture all students, to include in the powerpoint slide show. On June 29th students will practice their presentations in the room where they will present. On June 30th refinements will be made to the presentation and on July 1st students will present their posters to: each other, and to professionals the Research Instructor invites and to parents the students invite.

Qualifications:

- Applicants must obtain permission and documentation from an NAU faculty member to access lab and computer teaching facilities and equipment that students attending rural high schools would normally not be familiar with using. (The Four Corners director can only provide one Research Instructor with a lab classroom, therefore it is essential that most of the Research Instructors obtain permission from faculty to create a space for the instructor and the students to use daily, if the instructor can get permission to use a computer lab, lecture class and lab space that would be fantastic, but not required. Space is becoming more of a premium so this may be the most difficult portion of the application. Please brainstorm with the project director if this is too challenging.
- Applicant possesses life experiences that include an ability to relate with students from diverse family backgrounds (low-income or first generation in their family to potentially complete a college degree).

Responsibilities:

- Teach approximately 10-15 high school students to each write a technical research paper. Facilitate these students to all take turns presenting their results in front of a poster they create together and then to present a slide show describing how much fun they had.
- Research Instructors should propose research from their own experience either a lesson or lab they found exciting as a college student, since high school students will need to be taught background information and writing skills a lab provides enough new concepts to develop a well paced research experience. Most of the teaching hours will be spent teaching the students how to write and editing their writing. Ideas for projects need to be discussed with the Project Director (Terry Hubbard 523-1315) as part of the application process.
- Develop, for June 5th, a 10 minute demonstration/ powerpoint presentation activity to present to two groups of 30 students each to hook them into choosing your project.
- Submit a daily schedule that incorporates daily meetings, student deadlines, presentation rehearsals, research conference (see attached) to ensure each research group completes their papers at same pace as the other Research Instructor's groups. This part of the application should be discussed with the director prior to starting your schedule.
- Create Student Syllabus to teach students how to use a syllabus and to demonstrate setting and meeting deadlines
- Obtain approval from director for limited equipment purchases and order by March 31st.
- Participate in staff training May 26th 9:00 AM - Noon
- Participate in Research Instructor meetings 7:45-8:15 AM daily
- Maintain contact with Four Corners Main office(cell phone, preferred)
- Fulfill Computer Lab Aid Responsibilities in Computer Labs as needed
- Teach each student to write individual research paper, facilitate writing with each student
- 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
- Collaborate with other Research Instructors to create a professional conference atmosphere
- Coach research group to formally present research results in a conference using power point
- Other duties as assigned

Application Components:

Part 1:

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

Conviction Disclosure Form

- Unofficial Transcripts from all post secondary institutions attended
- Draft Schedule for project (include deadlines for sections of research paper, poster, and powerpoint)
- If permission is granted by the Project Director to provide a field trip requiring transporting students include fieldtrip date and time in schedule and provide a copy of Van training card if a field trip is necessary and approved by the director

- Tues. May 26** R-I Training 9:00 AM – Noon, University Union Room 254 Learning Assistance Center Bio Lab
- Fri. June 5** Biology Room 256 8:00 AM – 11:00 Present a 10 minute demonstration/ powerpoint presentation to entice students to prioritize your research project as their first choice.
- Mon. June 8** 8:05 AM meet in lobby of Cowden Residence Hall.
Meet your students, start research, and take them on the bus, if necessary, so they know how to get to class the next day by 8:25. (Students should arrive at 8:25 because their schedule says 8:30). Five minutes early is on time. Remember you will be in the meeting before class.
- Tues. June 9
(and daily)** 7:25 AM Terry Hubbard's Office First R-I Meeting. Please note that Four Corners runs a strict schedule. Therefore the meeting is scheduled at 7:45 but it will start at 7:40 to be in-line with students' standards.
- Fri. June 19** No Class. (Dorm closed for a 3 day weekend)
- Mon. June 29** By appointment in Wettaw Lecture Hall: Practice Research Poster Session all technical papers due to Terry.
- Tues. June 30** 8:25 – 11:45 Practice improving presentation in own classroom.
- Wed. July 1** 1:00 – 3:00 Poster Session Wettaw Lobby and Powerpoint Wettaw Lecture Hall
- Thurs. July 2** 4:00 PM Last day to submit final grades with supporting documents to 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
(quantity)
used under the supervision of _____. This agreement is
(Name of Research Instructor)
valid between June 5 and July 1, 2009.

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 statute(s).

09/02/05

If you checked "Yes" to the following question:

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

Complete information on will expedite the background check and fingerprint process.

Please *explain* the crime and list the offense date, city, county, & state for *each* offense in the space below and on additional pages if needed.

(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.)

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: _____

International Employment Location: _____

Dates at Location: _____

Physical Home Address (not P.O. Box
or APO/FPO): _____

City: _____

Country: _____