UA Initiative for the Development of Online Programs

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Program Title: Bachelor of Applied Science (Meteorology)

Project Description
A distance learning program for a Bachelor of Applied Science (Meteorology) degree, offered through Outreach/UA South, providing a pathway for the airmen and women serving as military weather forecasters to earn a Bachelor's degree, regardless of where they might be deployed. This newly approved BAS (Meteorology) program is the first of its kind in the country, and could potentially reach over 2000 weather forecasters throughout the US Armed Services. We collaborate closely with Pima Community College and UA Outreach College.

What was accomplished?
• Landing page for the program was created.
• Two Atmospheric Sciences (ATMO) courses now available for delivery through UA Outreach using eCollege.
• Five more ATMO courses being developed currently, and close to completion.

Assessment
At both levels (course, program) direct measures of learning will be collected (exam results, time to completion, retention rate, web-based surveys). The collected information will be used to improve teaching, curriculum and resource allocation. Our discipline traditionally requires a mixture of mathematical derivations, short essays, and numerical problem solving, all of which will be delivered online; and assessed by a combination of quizzes, essays, examinations, and classroom participation (through chat rooms and discussion boards). Cheating is not an issue because we simply request the student's commanding officer to arrange for a proctor.

Goals
The overall objective is for a student to earn a bachelor of applied science degree in meteorology that will allow the student to become a professional meteorologist, eligible for promotion within the military, and for employment in the private sector upon separation. The successful student will:
• Apply mathematical and statistical methods to solve meteorological problems.
• Interpret mathematical models of weather and climate and represent information symbolically, visually, numerically, and verbally.
• Estimate answers to meteorological problems and determine their reasonableness.
• Make accurate weather forecasts and warnings.

Future Plans
• Applying for inclusion in the Air Force University Associate-to-Bachelors program (AU-ABC) available via the Air Force portal.
• Working with the University Corporation for Atmospheric Research (UCAR) to include appropriate COMET training modules into our courses.
• US Navy weather forecasters are now eligible for admission; in fact the first one is now enrolled.
• Develop more courses to provide students a wider range of topics to choose from.
• Assess all ATMO courses using Quality Matters rubric.

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