

# Academy for Math, Engineering & Science

Updated 6/13/08

## END OF YEAR SUMMARY: JUNE 2008

### Graduating Class 2008 – AMES 3<sup>rd</sup> Graduating Class

Graduation will be held on June 5, 2008

2:00 p.m.

Libby Gardner Hall – University of Utah

**Facts:** 90 Graduates  
47 Males  
43 Females  
37% of students identify themselves as ethnic minority

- ACT Test: AMES students averaged a 24 (Dec. 2007) composite for this exam. One 2008 Senior received a 35 composite (36 perfect score) on the exam.
- SAT Test: The students who have taken the SAT test have consistently scored in the 2000 range. Two AMES Seniors are National Merit Finalists.

23 Students met the State Initiative Scholars requirements (36%) of graduating class  
1 Student was accepted at MIT (second year in a row)  
75 Seniors took at least one U of U Class while at AMES  
873 U of U credit hours earned by AMES Seniors valued at \$397,215  
56 AP Exams were passed by the AMES Seniors (does not include tests taken spring of 2008)

Seniors will be attending the following Colleges/Universities or will continue their education:

**74 out of 90**

#### In State

25	University of Utah
2	Brigham Young University (Provo)
21	Salt Lake Community College
4	Utah State
4	Westminster
1	Utah Valley State College
3	Weber State
1	Snow College

#### Out of State

1	Colorado State College
1	Vassar
1	Simmons
1	St. Olaf College
1	University of Wyoming
1	Embry Riddle
1	Iowa Western Community
1	Arizona State Univ.
1	BYU – Hawaii
1	Pacific University

#### Other Institutions (3 Students)

1	Art Institute
1	Ameritech
1	SEA Institute

AMES seniors have been admitted to Utah (BYU, College of Eastern Utah, Dixie State, Salt Lake Community College, Snow, College, Southern Utah University, Utah State University Utah Valley State College, Weber State University, Westminster) colleges and universities, as well as over 32 out-of-state colleges and universities.

The out-of-state colleges AMES seniors have been admitted to include: MIT, Pacific University, Arizona State, Simmons College, American University, Boston College, Evergreen State College, Whitman College, Vassar College, Trinity College, Northwestern University, Ohio University, Tulane University, Carleton College, Bryn Mawr, Iowa Western Community College, Reed College, Pomona College, Embry-Riddle Aeronautical University, Colorado State, University of New Mexico, Idaho State, Harvey Mudd, St. Olaf College, Washington University, Prescott College, Great Basin College, BYU-Hawaii & Idaho.

#### Scholarships Received by AMES Seniors (as of June 5, 2008)

**45 of 90** seniors have been awarded scholarships in the amount of: \$1,262,762

- 1 Student was a semi finalist for the Micron National Scholarship
- 2 Students were National Merit Finalists
  
- 1 10<sup>th</sup> Grade Student was awarded the Energy Solutions Scholarship

#### Robotics

Five AMES teams competed successfully in the ITT Lego Mindstorm Competition. AMES teams won in several categories, including the Director's Cup for the most teams at the competition.

#### Science Fair

From the AMES Science Fair, 17 projects advanced to the Regional Science Fair. At the Regional Science Fair, AMES projects were given 19 Awards

12 projects out of 17 entered were recognized as category and/or special award winners

AMES projects were entered in 8 categories and placed in 7/8 (6/8 first place);

Of the 8 categories entered by AMES...2 or more places awarded to AMES for 4/8 categories:  
Behavioral and Social Sciences; Chemistry; Computer Sciences; Mathematics;  
Engineering: Electrical and Mechanical; Engineering: Bioengineering and Materials; Medicine and Health; Team Projects

6- First Place Awards

3- Second Place Category Awards

1- Third Place Category Award

At the Regional Fair 8/14 Behavioral and Social Science Projects were from AMES

1- Invited to First International Self Sustaining Energy Conference, Houston, Texas; May 1-5

## **National Science Foundation Grant**

AMES received a two year grant to encourage participation and retention of high school students in the engineering field. 12 AMES students are working with University of Utah Chemical Engineering Department students (1 university student is an AMES graduate) and professors. The project entails developing plans for sustainable energy production to run snow making machines at area ski resorts. AMES is in the first year of the grant and most of the AMES students want and will continue in the program.

## **Science Olympiad**

13 Student participated in the Science Olympiad. The team competed in 20 events. AMES placed in the top 6 in 12 of these events and medaled in three events. The students were awarded a total of over \$6000 in scholarships. Overall AMES placed 7<sup>th</sup> at the competition out of over 22 teams.

## **AMES Award Banquet** (5<sup>th</sup> Annual)

This year 125 AMES students will be recognized for their outstanding achievement in school related programs.

## **University of Utah Partnership – School Year 07-08**

1. 212 students (12<sup>th</sup> & 11<sup>th</sup> graders) currently enrolled in U of U classes taught on the AMES campus by U of U faculty/instructors. Classes being taught: Academic Writing, Calculus, Chemistry, Chemistry Lab, Statistics, Humanities, College Algebra/Trigonometry.
2. The U of U Honors College Student Presentations is given regularly to the AMES Senior Seminars.
3. Two AMES Seniors received \$5,000 scholarships designated just for AMES students.
4. Campus tours for AMES Juniors and Seniors.
5. LEAP Tutors
6. College of Education student teachers.
7. Coordination with College of Engineering NSF Project
8. Specialized AMES Community and U of U Lecture Series on the AMES campus (immigration, diversity in engineering, film studies, and science of race).
9. U of U faculty mentors for AMES science fair participants.

## **AMES Community Partnerships**

1. Part of the requirements for graduation from AMES is that all Juniors participate in an internship. This year's internship partners include (among others):

<b><u>Placement</u></b>	<b><u>Career Area</u></b>
University of Utah NSF Engineering Project	Bio Engineering Computer Engineering Chemical Engineering Civil Engineering General Engineering Aerospace Engineering
Maliheh Clinic	Medicine
Midvale Family Clinic	Medicine
Jordan Valley Hospital	Medicine/Nursing
Rocky Mountain Therapy	Physical Therapy
Michael Watson, DDS	Dentistry
Dr. Steven Hunt	Genetics
West Valley Fitness Center	Personal training
Cottonwood Animal Hosp.	Veterinary Medicine
VCA Animal Hospital	Veterinary Medicine
Sugar House Vet Clinic	Veterinary Medicine
Hogle Zoo	Veterinary medicine
<b><u>Placement</u></b>	<b><u>Career Area</u></b>
SpyHop	Music Production
Law Offices of Jose Loayza	Legal
KCM Design	Architecture
Blakemore Real Estate	Realtor

2. Ongoing business support from:
  - Micron
  - IM Flash
  - Merit Medical

## **Continuing Features**

1. AMES students participate in hosted Cottonwood High School programs, including debate (AMES 2007 Graduate awarded scholarship; continues to teach part-time for CHS program while attending Westminster); other CHS programs in which AMES students participate include music, drama, art, athletics.
2. Active PTSO with over 150 family memberships.
3. Open access AP classes include: Human Geography (9<sup>th</sup> graders); World History (10<sup>th</sup> graders); US History (11<sup>th</sup> graders); Art History and Psychology.
4. AMES sponsors co-curricular clubs including student council, newspaper, yearbook, literary magazine, rocketry, robotics, garden, veggie, GASA, and chess.
5. AMES is one of 10 of the 130 ECHS in the US participating in a Kellogg Foundation grant to incorporate writing in all curriculum areas.
6. Math & Physics Saturday School: AMES staff and students offer assistance to 50-60 AMES students every week at the Hunter Library.
7. AMES Summer School: Entering AMES freshman participate in a week long study skills camp each summer; approximately 85% participation.

## **Demographic Profile**

AMES has been designated a Title I School. This year's students include:

	<u>9<sup>th</sup> Grade</u>	<u>10<sup>th</sup> Grade</u>	<u>11<sup>th</sup> Grade</u>	<u>12<sup>th</sup> Grade</u>	<u>Total</u>
Male	63	53	50	47	213
Female	63	56	37	44	200
Total	126	109	87	87	413
Ethnic Background	51%	44%	46%	36%	45%
Title I	55	51	39	34	179
Econ. Disadvantage	55	52	39	32	178
MESA	89	73	57	59	278

34% of Graduating Seniors' (30 seniors) parents have not received an AA, BS, or BA Degree

## **New Items for 08/09 School Year**

- The interest in AMES continues to grow. AMES received 332 applications for the new 9<sup>th</sup> Grade class. These applications came from over 58 different middle/junior high schools through out the valley. AMES through a lottery process has selected 141 students for the class of 2012.
- In partnership with Cottonwood High School AMES will be adding Arabic and Chinese as options for the students to meet their foreign language requirements. These languages will be taught on the AMES/CHS campus by native speaking instructors (Chinese and Arabic endorsed). In addition to the traditional classroom format and learning, these courses will be enriched with various cultural topics, projects, exposures, and direct experiences such as guest speakers, university students as tutors and cultural activities with the local communities. These classes are funded, in part, by the Utah legislature Strategic language Initiative.