

## AGENDA ITEM: Replication Application—Arizona Agribusiness & Equine Center, Inc.

Arizona Agribusiness & Equine Center, Inc. (Entity ID 85816)(AAEC) submitted a complete replication application on June 15, 2016. AAEC seeks a charter for a new entity, Arizona Agribusiness & Equine Center Mesa to replicate AAEC-SMCC Campus and to operate a new school in Mesa. The school will be named Arizona Agribusiness & Equine Center Mesa and will serve students in grades 9 through 12 with a targeted start date of August 3, 2017.

**Replication Model School** — AAEC-SMCC Campus

**Grades Served** —9–12

### ACADEMICS

AAEC-SMCC Campus, the Replication Model School, is eligible to replicate based on three years of academic performance meeting the Board's expectations, summarized in the table below:

Fiscal Year	Grades Served	Overall Rating
FY2014	9-12	90.00
FY2013	9-12	89.06
FY2012	9-12	92.81

The Academic Dashboard of the Replication Model School is provided in Appendix A. Academic Dashboard.

AAEC operates 5 schools serving grades 9-12, each under a separate charter. To establish eligibility, the 2014 academic performance of Associated Schools was considered, as summarized in the following table. The 2014 overall ratings are provided for the Board's information:

Associated School	Opened	2014 Overall Rating
Arizona Agribusiness & Equine	1997	90.00
AAEC Paradise Valley	1999	86.25
Arizona Agribusiness and Equine Center - Red Mountain	2005	82.50
Arizona Agribusiness & Equine Center Estrella Mountain	2010	92.50
Arizona Agribusiness & Equine Center- Prescott Valley	2011	79.41

### EDUCATIONAL PLAN

*The following summary was created from excerpts and summaries of the information submitted for the applicant's Educational Plan.*

In the application, Arizona Agribusiness & Equine Center, Inc. has affirmed that the Educational Plan of the new entity and school will be consistent with the Educational Plan of the existing entity and Replication Model School.

#### Mission

The mission of Arizona Agribusiness & Equine Center, Inc. is to provide quality educational opportunities facilitated by the use of high school curriculum focusing on academics, biotechnology, science, and engineering. AAEC will provide effective technology and support to help students meet state academic standards in math, science, English, reading, and writing and graduate from high school in pursuit of a career and/or continue their education with secondary institutions. Students will have the unique opportunity to learn hands-on using state-of-art engineering, aeronautics, and computer-aided technologies.

**Program of Instruction**

According to the Charter Holder, the program of instruction for AAEC is designed to support the school’s mission and philosophy by ensuring student success in academic achievement. This is done through an instructional methodology that includes direct instruction, cooperative learning, discovery, inquiry, and an interdisciplinary approach through project based learning. Group and individual instruction is used to maximize student achievement with small class sizes of 23 students to one teacher. Increased instructional time is used to increase retention and understanding through supplemental classes. The latest methodologies and practices are incorporated into classroom instruction and activities. Each student’s academic plan incorporates career exploration, college course advisement, and personal development. (Presented in the application portfolio: Program of Instruction Narrative, 9-2)

**Target Population**

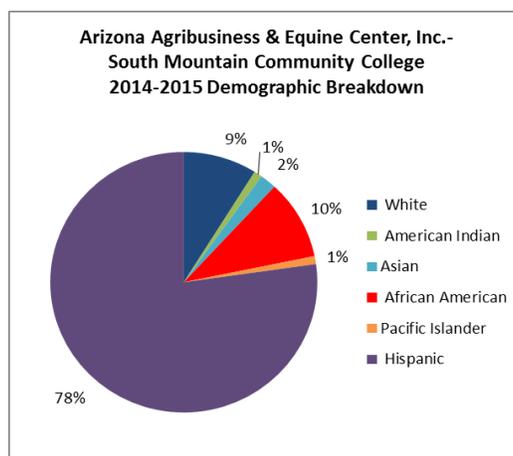
In the application, AAEC has identified a target location at the intersection of Southern and Longmore in Mesa. The narrative states that the total population within a ten mile radius of the expansion site is over one million with a total student population of nearly 100,000 students within five miles of the site from grades K through 16. Within a five mile radius there are 64 elementary schools currently serving the target student population. Only two high schools are located within a two mile radius of the proposed Mesa location: Dobson High School and Westwood High School. Both schools are currently assessed as “B” schools with graduation rates of 79% and 74% respectively.

**Profile**

The percentage of students who were eligible for Free and Reduced Lunch, classified as English Language Learners, and classified as students with disabilities in the 2014-2015 school year is represented in the table below for AAEC-SMCC Campus, Dobson High School, and Westwood High School.

Category	AAEC-SMCC Campus <sup>1</sup>	Dobson High School <sup>1</sup>	Westwood High School <sup>1</sup>
Free and Reduced Lunch	74%	51%	66%
English Language Learners	*	1%	2%
Special Education	6%	11%	12%

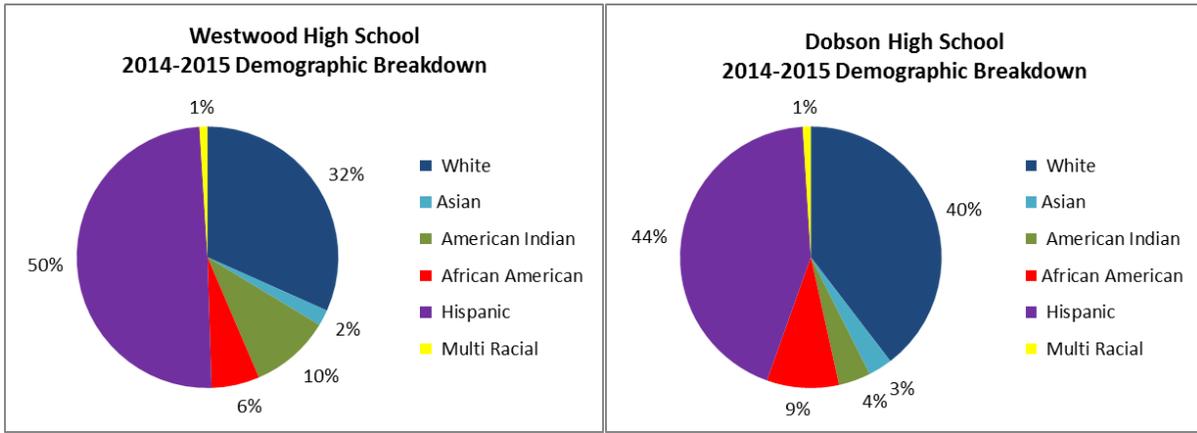
The demographic data for AAEC-SMCC Campus, and two nearby high schools, Dobson High School and Westwood High School from the 2014-2015 school year is represented in the charts below.<sup>2</sup>



<sup>1</sup> Information provided by the Research and Evaluation Division of the ADE. If the percentage of students in a non-ethnicity-based demographic group is not reported to ADE, or is 0% or 100%, the percentage for that demographic group is redacted.

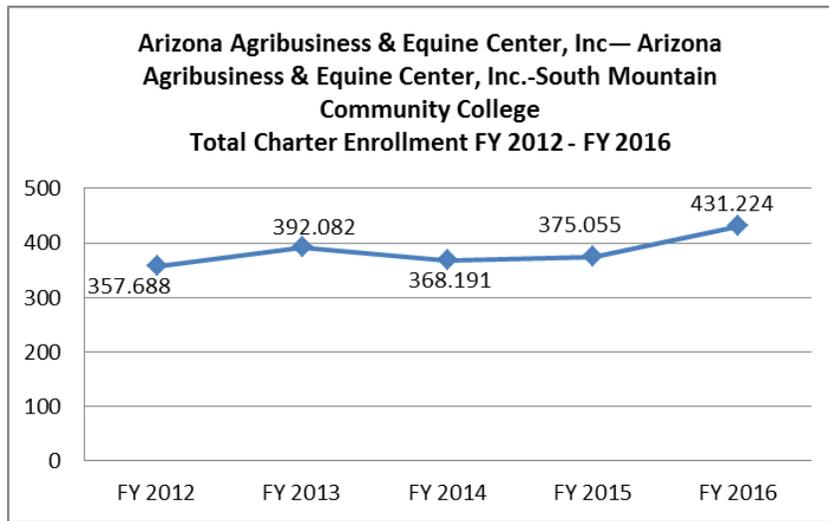
<sup>2</sup> Information provided by the Research and Evaluation Division of the ADE.





**Enrollment History**

Arizona Agribusiness & Equine Center, Inc. has operated AAEC-SMCC Campus since FY 2002. The table below summarizes enrollment in the last five years, based on ADE 100th day average daily membership. The enrollment cap is 450.



(Data provided by Arizona Department of Education)

**Enrollment Policies**

Arizona Agribusiness & Equine Center, Inc. admits all eligible pupils who submit a timely application. AAEC gives enrollment preference to pupils returning to the school in the second or any subsequent year of its operation and to siblings of pupils already enrolled in the school. If, by the application deadline, the number of applications exceeds the capacity of a program, class, grade level, or building, all applications for that program, class, grade level or building will be selected for the available slots through an equitable selection process, such as a lottery. After the application deadline, pupils for any remaining slots or from a waiting list will be accepted in chronological order. Open enrollment will begin once the charter is approved. (Presented in the application portfolio: Target Population and Enrollment, 7-4)

**OPERATIONAL PLAN**

*The following summary was created from excerpts and summaries of the documents submitted for the applicant’s Operational Plan.*

Arizona Agribusiness & Equine Center, Inc. has opened and is continually operating five “A” rated schools. Arizona Agribusiness & Equine Center Mesa will monitor operational components as part of their ongoing assessment



process. Marketing and student enrollment will be a primary focus with a secondary focus on parent involvement. Within the first three years of the school’s opening, marketing efforts will be supported by a strong community involvement and word-of-mouth as well as social media targeted campaigns. Additional efforts will include open house style informational/open enrollment meetings supported by targeted advertising and direct marketing. The school will be able to provide for purchases, furniture and technology because they will not be purchased or replaced simultaneously or in large quantities. (Presented in the application portfolio: Section 6. Operational Plan Narrative, 10-2 and 10-3)

**Charter Holder Entity for Replication Charter**

The replication charter will be held by Arizona Agribusiness & Equine Center Mesa and the new school will have the same governing body as the Replication Model School. (Presented on the replication application title page: Section 2. Entity Information and 3. Governance)

In the Operational Plan narrative, AAEC stated that there are no concrete plans for further expansion to other areas besides Mesa. AAEC is continually exploring opportunities for expansion into areas that would meet the conditions and core components of the model it has implemented at its other five locations. AAEC considers many factors such as strong community support, remaining the only schools in Arizona to provide students with an average of 46 community college credits by the time they graduate, and a belief that it has an effective model, which is effective regardless of the socioeconomic status of the surrounding community. (Presented in the application portfolio: Operational Plan Narrative, 10-1)

**BUSINESS PLAN**

*The following summary was created from excerpts and summaries of the documents submitted for the applicant’s Business Plan.*

**Site Information**

Proposed School Name:	Arizona Agribusiness & Equine Center Mesa
Proposed Location:	Intersection of Southern and Longmore in Mesa
Proposed Facility:	The proposed facility is approximately 21,000 square feet. The site will include 10 classrooms, 5 offices, a multipurpose room, and 4 bathrooms.  (Presented in the application portfolio: F. Planned Facility)

**Financial Performance of Applicant**

Arizona Agribusiness & Equine Center, Inc. Meets the Board’s financial performance expectations.

**BOARD OPTIONS**

Option 1: The Board may approve the replication application package. Staff recommends the following language for consideration: I move, based on the information contained in the Board materials and presented today, that the Board approve the replication application and grant the replication charter to Arizona Agribusiness & Equine Center, Inc. to establish Arizona Agribusiness & Equine Center Mesa to serve grades 9-12.

Option 2: The Board may deny the replication application. The following language is provided for consideration: I move, based on the information contained in the Board materials and presented today, that the Board deny the request for the replication charter of Arizona Agribusiness & Equine Center, Inc. to establish a charter school for the reason:

- (list the specific reasons the Board may have found during its consideration).



General Site Contact Inspections Grades Governing Body FY Data Site Visits Member Campuses Amendments

Academic Performance

## Academic Performance

[Edit this section.](#)

### AAEC-SMCC Campus

		2012 Traditional High School (9 to 12)			2013 Traditional High School (9 to 12)			2014 Traditional High School (9 to 12)		
1. Growth		Measure	Points Assigned	Weight	Measure	Points Assigned	Weight	Measure	Points Assigned	Weight
1a. SGP	Math	64	75	7.5	76.5	100	7.5	65	75	7.5
	Reading	74	100	7.5	55	75	7.5	61	75	7.5
1b. SGP Bottom 25%	Math	78	100	7.5	82	100	7.5	83	100	7.5
	Reading	80.5	100	7.5	59	75	7.5	77.5	100	7.5
2. Proficiency		Measure	Points Assigned	Weight	Measure	Points Assigned	Weight	Measure	Points Assigned	Weight
2a. Percent Passing	Math	73 / 56.3	75	10	73.5 / 58.4	75	10	81.2 / 60.9	75	10
	Reading	94 / 76.4	100	10	93.8 / 82.4	100	10	97.5 / 84.5	100	10
2b. Composite School Comparison	Math	17.1	100	7.5	16.6	100	7.5	21.8	100	7.5
	Reading	16.7	100	7.5	11.3	75	7.5	11.5	75	7.5
2c. Subgroup ELL	Math	53 / 43.8	75	3.75	73.3 / 50.9	75	3.75	73.3 / 57.9	75	3.75
	Reading	90 / 62.3	75	3.75	100 / 76	100	3.75	100 / 77.6	100	3.75
2c. Subgroup FRL	Math	74 / 45.9	100	3.75	75 / 50.1	75	3.75	79.5 / 51.6	100	3.75
	Reading	94 / 67.8	75	3.75	95.3 / 76.2	75	3.75	96.5 / 78.9	75	3.75
2c. Subgroup SPED	Math	NR	0	0	NR	0	0	NR	0	0
	Reading	NR	0	0	NR	0	0	NR	0	0
3. State Accountability		Measure	Points Assigned	Weight	Measure	Points Assigned	Weight	Measure	Points Assigned	Weight
3a. State Accountability		A	100	5	A	100	5	A	100	5
4. Graduation		Measure	Points Assigned	Weight	Measure	Points Assigned	Weight	Measure	Points Assigned	Weight
4a. Graduation		84	100	15	84	100	15	96	100	15
Overall Rating		Overall Rating			Overall Rating			Overall Rating		

Scoring for Overall Rating  
89 or higher: Exceeds Standard  
<89, but > or = to 63: Meets Standard  
<63, but > or = to 39: Does Not Meet Standard  
Less than 39: Falls Far Below Standard

92.81

100

89.06

100

90

100

# **Replication Application**

## **Title Page**



Arizona State  
Board for  
Charter Schools



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## Replication Application

### Downloads

 [Download all files](#)

**Note:** Please be patient. This may take up to a few minutes to complete depending on the number of files included with this application.

## 1. Applicant Agreement

### Application Agreement Information

I certify all information contained in this application is complete and accurate, realizing that any misrepresentation could result in disqualification from the replication application process or revocation after award. I understand that incomplete applications will not be considered.

The Applicant acknowledges that all information presented in the application package, if approved, becomes part of the charter and will be used for accountability purposes throughout the term of the charter, and that the charter may be amended or modified by mutual agreement, in writing, of the parties pursuant to the terms of the charter contract when signed.

The Applicant acknowledges that the Principals have read all Arizona statutes regarding charter schools and that, if approved to operate a charter school, the Applicant is subject to and will ensure compliance with all relevant federal, state and local laws and requirements.

The Applicant acknowledges that the most current academic data will be provided to the Board for its consideration of the application.

The Applicant acknowledges that if approved to operate a charter school, the Applicant must execute a charter contract with the Arizona State Board for Charter Schools ("Board") within twelve months after the Board decides to grant the charter. If a charter is not timely signed, the Board's decision to grant the replication charter expires.

The Applicant acknowledges that if approved to operate a charter school, the Applicant must begin providing educational services no later than the second fiscal year after the Board's decision to grant the charter. Failure to begin providing educational instruction accordingly may result in the revocation of the charter.

The Applicant acknowledges that if approved to operate a charter school, the Applicant must provide the number of days of instruction as approved in the application within the State's fiscal year that begins July 1st and ends June 30th. Failure to do so may result in revocation of the charter.

### Application Agreement Signature

Linda Proctor Downing 04/28/2016

## 2. Entity Information

### Name of Charter Holder Entity Eligible for Replication

Arizona Agribusiness & Equine Center

### Name of Replication Model School

Arizona Agribusiness & Equine Center - SMCC

**Name of Proposed Charter School**

Arizona Agribusiness & Equine Center Mesa

**Will the replication charter be held by the existing entity?**

Yes, the existing entity will hold the replication charter. (Skip Section A and go to Governance Structure)

**A: New Entity and Corporate Principals**

**Statement of Consistency**

- By checking this box, I understand and agree that the Replication Application process requires the organizational structure of the new entity to be consistent with the organizational structure of the existing entity.

**Name of New Entity**

Arizona Agribusiness & Equine Center Mesa

**Authorized Representative for New Entity**

- Linda Proctor Downing
  - Email: ldowning@aaechighschools.com
  - [REDACTED]
  - [REDACTED]
  - Files:
    -  [Fingerprint Clearance Card](#)
    -  [Affidavit](#)
    -  [Background Information Sheet](#)
    -  [Resume](#)
    -  [Verification of Coursework/Degree](#)

**Authorized Representative Mailing Address**

3636 N. Central AVE  
Suite 1050  
Phoenix , AZ 85012

**County**

Maricopa

**Day Time Phone**

602-297-8500

**Fax**

602-297-8540

**Form of Organization**

Non Profit Corporation

**Entity Type**

Government Entity

**Charter Principals Background Information**

Upload all required background information for each Officer, Director, Member, or Partner of the new entity.

**Charter Principals**

- Pamela Burns
  - Email: pburns410@aol.com
  - [REDACTED]
  - [REDACTED]
  - Files:
    -  [Fingerprint Clearance Card](#)
    -  [Affidavit](#)
    -  [Background Information Sheet](#)
    -  [Resume](#)
    -  [Verification of Coursework/Degree](#)
    -  [Current Charter Affiliations](#)
- Irene Rassi
  - Email: JARassi@aol.com
  - SSN: Not provided

- o DOB: Not provided
- o Files:
  -  Fingerprint Clearance Card
  -  Affidavit
  -  Background Information Sheet
  -  Resume
  -  Verification of Coursework/Degree
  -  Current Charter Affiliations
- Linda Proctor Downing
  - o Email: ldowning@aaechighschools.com
  - o 
  - o 
  - o Files:
    -  Fingerprint Clearance Card
    -  Affidavit
    -  Background Information Sheet
    -  Resume
    -  Verification of Coursework/Degree
    -  Current Charter Affiliations

**Required Exhibits for A:**

-  [Download File](#) —

### 3. Governance Structure

**Statement of Consistency**

- By checking this box, I understand and agree that the Replication Application process requires the governance structure of the new school to be consistent with the governance structure of the Replication Model School.

Answer the following question by checking the appropriate box and completing any additional information requested.

**How will the governance structure of the new school relate to the Replication Model School?**

The new school will be operated by the existing entity and have the same governing body as the Replication Model School. (Skip Section B and go to Education Service Providers.)

**B: New Governing Body**

- Linda Proctor Downing/602-297-8500 (Charter Organization)
- Michael Larrabee/602-228-4916 (Parents)
- Pamela Burns/602-526-8901 (Community)
- Kenneth Roberts Ph.D./480-510-8355 (Community)
- Linda McCormick/602-550-4857 (Other)

### 4. Education Service Provider

**Does the existing entity have a relationship with an ESP?**

No (Skip Section C and go to Educational Plan)

**C.1: Education Service Providers -- Contractual Relationship**

**Statement of Consistency**

*(No response)*

**What is the name of the ESP?**

*(No response)*

**Required Exhibits for C.1**

No documents were uploaded.

## C.2: Education Service Providers -- Governance Relationship

### Statement of Consistency

(No response)

### What is the name of the ESP?

(No response)

Describe the nature of the governance relationship:

### Required Exhibits for C.2

No documents were uploaded.

## 5. Educational Plan

### Target Population and Enrollment of New School

#### Statement of Consistency

- By checking this box, I understand and agree that the Replication Application process requires the target population of the new school may be similar to the population of the Replication Model School, and that differences must be addressed in responses to the questions below.

#### Statement of Consistency

- By checking this box, I understand and agree that the Replication Application process requires the enrollment policies of the new school to be consistent with the enrollment policies of the Replication Model School, and that enrollment of students cannot begin until the charter is signed.

#### Grades Requested for Replication Charter Contract

- 9th
- 10th
- 11th
- 12th

#### Enrollment Cap

300

#### Grades Served Year 1

9-12

#### Projected Enrollment Cap Year 1

300

#### Grades Served Year 2

9-12

#### Projected Enrollment Cap Year 2

300

#### Grades Served Year 3

9-12

#### Projected Enrollment Cap Year 3

300

#### School Calendar Type

Standard

If alternative calendar, describe in 10 words or less:

#### Instructional Days

180

#### Target Start Date

08/03/2017

### School Characteristics

- Equine/Agricultural Studies
- College Preparatory

Target Population and Enrollment of New School Narrative – [Download File](#)

## Program of Instruction

### Statement of Consistency

- By checking this box, I understand and agree that the Replication Application process requires that the Educational Plan of the new entity and school to be consistent with the Educational Plan of the existing entity and Replication Model School.

### Mission Statement

The mission of Arizona Agribusiness & Equine Center is to provide quality educational opportunities facilitated by the use of high school curriculum focusing on academics, biotechnology, science, and engineering. AAEC will provide effective technology and support to help students meet state and academic standards in math, science, English, reading, and writing. They graduate from high school in pursuit of a career and/or continue their education with secondary institutions. Students will have the unique opportunity to learn hands-on using state-of art engineering, aeronautics and computer-aided technologies.

Program of Instruction Narrative – [Download File](#)

Required Exhibit: (for schools offering high school grades only) – [Download File](#)

## 6. Operational and Business Plan

Operational Plan Narrative – [Download File](#)

### Facility Acquisition for New School

Has a confirmed facility been acquired for the new school?

No (Complete Section D.2)

#### D.1: Confirmed Facility

Address of Confirmed Facility

Required Exhibits for D.1:

No documents were uploaded.

#### D.2: Planned Facility

Identify the proposed location of new school by providing cross streets that would be the center of a 2.5 mile radius.

Dobson Road Southern Ave. Mesa Arizona

Planned Facility Narrative – [Download File](#)

### Business Plan

Does the financial performance of the existing entity meet the Board's financial performance expectations?

Yes (Skip Section E)

#### E. Business Plan for Expansion

Required Exhibits for E

[Download File](#) – Please find attached the start up budget and 3 year budget for the new Mesa location.

## 7. Additional Information

Additional Information

Do not complete this section unless specifically directed to do so in the application being completed.

Arizona Agribusiness & Equine Center INC.  
Corporate Board Meeting Minutes 4.18.2016 1:00 PM Teleconference  
078510000, 078993000, 078707000, 078587000 138785000  
3636 N Central AVE Suite 1050 Phoenix AZ 85012

- I. Roll Call Linda Proctor Downing Board President, Pam Burns Board Secretary, Irene V. Rassi Board Member, Suzanne Drakes Assistant Director.
- II. Adoption of Agenda 4.18.2016: Irene V. Rassi made a motion to adopt the 4.18.2016 Board Agenda, Pam Burns seconded the motion, the motion carried.
- III. Approval of Mesa Replication Charter: Irene V. Rassi made a motion to approve the Mesa Replication Charter; Pam Burns seconded the motion the motion carried.
- IV. Adjournment: Pam Burns made a motion to adjourn the 4.18.2016 Corporate Board Meeting, Irene V. Rassi seconded the motion, the motion carried, and the meeting was adjourned at 1:10 PM.

**Application Portfolio**  
**Target Population and Enrollment**

1. 7.1 - AAEC’s leadership is expert in promoting academic success for educationally disadvantaged students. This is demonstrated by the sustained improved performance of our AAEC-South Mountain campus as well as our four other high school programs. Of the more than 1,727 students in grades 9-12 enrolled at AAEC Early College High Schools, more than 452 of the students are enrolled at our South Mountain campus where the student population composed of the following demographics: 79% qualifying for free/reduced lunch, 4% categorized as Special Education, 3% ELL, and 96% non-white ethnic and/or racial groups. Our experience in sustained academic growth in a community that serves educationally disadvantaged groups is demonstrated and relevant to our expansion plan.
  
2. All five of the current AAEC High School campuses are identified as “A” rated schools. Our high school program is successful in serving both educationally disadvantaged and mainstream students. We realized a baseline 4-year graduation rate of 90% at our South Mountain campus. Of our 2016 AAEC-South Mountain graduates, 100% were admitted into a two or four-year college and 18% graduated with both an Arizona High School diploma and a MCC Associate’s degree. The student demographic composition of our South Mountain campus puts this academic achievement in context, which makes it all the more compelling for the expansion of our program in the Mesa community, where a similar educationally disadvantaged student population is found. The chart below illustrates the academic achievements of our South Mountain High School students. Of particular note, is our students’ performance as compared to the state average for “Economically Disadvantaged” students.

AzMerit Spring 2015	ELA 9 Percent Passing	ELA 10 Percent Passing	ELA 11 Percent Passing	Algebra 1 Percent Passing	Geometry Percent Passing	Algebra 2 Percent passing
AAEC South Mountain	20%	41%	40%	34%	25%	42%
State of Arizona	16%	20%	19%	22%	19%	19%

3. The AAEC South Mountain community has a population of 100,565 people with a disproportionately larger children and teen population. The average commute time for families is 26.1 minutes, with the primary forms of transportation being personal vehicle and public bus services. AAEC South Mountain families generally reside within a five mile radius of the AAEC South Mountain High School campus. We anticipate that our Mesa High School campus families will also reside within a general five mile radius of our new facility.

7.2 - The AAEC-Mesa high school campus will target students from grades 9-12 in the five mile radius of the proposed site at Southern and Longmore in Mesa, a site that is conveniently located in close proximity to two highly-accessible highways, the Loop 101 and the US 60. The total population within a ten mile radius of the expansion site is over one million with a total K-16 student population within five miles of the site of nearly 100,000 students. Within the five mile radius, 64 elementary schools and 20 junior programs currently serve this student population. Only two high schools are located within a two mile radius of our Mesa site: Dobson High School(MPS) and Westwood High School(MPS), both schools are currently assessed as “B” schools with a graduation rate of 79% and 74% respectively. The following chart also illustrates the academic indicators for the AZMerit ELA and Math exams:

AZMerit	ELA 9	ELA 10	ELA 11	Algebra 1	Geometry	Algebra 2
Spring 2015	Percent Passing					
Dobson High School	22%	25%	27%	14%	14%	28%
Westwood High School	20%	27%	23%	20%	22%	35%

Our expectation is that our AAEC-Mesa high school program will support academic results similar to our AAEC-South Mountain high school program, which would impact the currently educational disadvantaged student population. The target student population would mirror the MCC campus population as well as the above high school communities. Population statistics for Dobson High School provide the following demographic information:

42% White

40% Hispanic

5% Not Specified

8 Black

1% Asian

4% Native American

The Free and Reduced Lunch, Special Education, and ELL student populations will closely align with our current AAEC-South Mountain student population:

4% Special Education

79% Free and Reduced Lunch

3% ELL

7.3 - Based on our research we found that there were over 13,000 families in the 5 mile radius that have students between the ages of 12-17 years of age.

7.4 - AAEC admits all eligible pupils who submit a timely application. AAEC give enrollment preference to pupils returning to the charter school in the second or any subsequent year of its operation and to siblings of pupils already enrolled in the school. If, by the application deadline, the number of applications exceeds the capacity of a program, class, grade level, or building, all applications for that program, class, grade level or building will be selected for the available slots through an equitable selection process, such as a lottery, except that preference shall be given to siblings of a pupil. After the application deadline, pupils for any remaining slots or from a waiting list will be accepted in chronological order.

7.5 - AAEC proposes that our open enrollment starts once the charter is approved.

**Application Portfolio**  
**Program of Instruction Narrative**

- 9-1. Provide a description of the charter holder's philosophical approach to improving pupil achievement. Include how this philosophy has impacted the success of the existing school. If a different population will be served in the new school, how does this philosophical approach apply?

#### EDUCATIONAL PHILOSOPHY

The educational philosophy of Arizona Agribusiness & Equine Center (AAEC) is to prepare young adults for excellence in academics, social responsibility and lifelong learning. AAEC provides educational programs for high school students in grades 9 through 12, as well as concurrent transferable college courses, at locations on or adjacent to campuses of the local County Community College Districts. Subject to capacity limits, the schools are open to all students within the state. Thirty percent of the students attending the AAEC's schools graduate from high school with both a diploma and an Associate's degree, thereby acquiring two years of college credit to transfer to a Post-Secondary Institution.

AAEC understands success cannot be achieved without all stakeholders involved including support from the community, parents, teachers, and administrators. Parents are viewed as partners in their children's education. The mission, vision, and goals of AAEC and community partners are aligned in order to assist students and parents to overcome any obstacles to student achievement.

The AAEC program focuses on high expectations, engaging instruction and rigorous assessments, which have helped AAEC, raise student's achievement. Program growth and refinement will continue. The school will continue to maintain the high quality that has had them ranked in U.S. News & World report "Best High Schools" and as Phoenix Magazine's "Top 10 School".

- 9-2. Describe the existing program of instruction of the current school, including methods of instruction and curriculum for the core academic content areas, which supports this philosophy and aligns to Arizona Academic Standards.

AAEC's instructional methodology is designed to support the school mission and philosophy by ensuring student success in academic achievement. The following is a summary of the instructional methodology:

- Teaching methods include direct instruction, cooperative learning, discovery, inquiry and interdisciplinary approach through project based learning.
- Group and individual instruction in order to maximize student achievement.
- Small class sizes: 23: 1 (student to teacher ratios).
- Increased instructional time to increase retention and understanding through supplemental classes.
- Incorporation of latest methodologies and practices into classroom instruction and activities.
- Incorporate career exploration, college course advisement and personal develop into each student's academic plan.

- 9-3. Present an explanation of how the implementation of the existing program of instruction meets the needs of the proposed target population.

The demographics of the Arizona Agribusiness and Equine Center school location strongly suggest that students will come from low-income households. Therefore, all of the outreach activities the school will use will go directly towards encouraging low-income and at-risk students to enroll in the school. To specifically target this group, AAEC will directly address the unique needs of the students and parents in a way that is appealing and understandable to both students and parents.

The AAEC marketing and outreach effort focuses on the needs of low income and at-risk students. Outreach materials inform parents of several positive features the school will have to offer:

- Small class sizes
- Free quality education
- Early College preparatory program
- Assistance in college application
- History of student success at AAEC
- Highly Qualified and Trained teachers
- Extracurricular activities providing students with unique educational opportunities in a safe environment
- Opportunities for parental involvement and parent input to directly affect school policy
- Community organization partnerships
- Exposure and training in high demand occupations and interest areas.

- 9-4. Describe the level of proficiency that students must obtain to demonstrate mastery of academic core content and clear criteria for promotion from one level to the next.

Students will be awarded credit based on a standard grading scale of 70%-100%.

All students will meet with a college advisor to discuss entrance requirements, financial aid, and scholarships. In addition, students will have the opportunity to visit the in-state universities.

A typical student will take at least 38 Community College Credits before graduation.

- 9-5. If your school serves a high school population, identify graduation requirements for the school that will meet State requirements. Describe the process and criteria for awarding course credit.

AAEC will follow a four-year plan for all high school students, which meets the graduation requirements set forth by the State of Arizona, as outlined in A.A.C. R7-2-302.02 and the Arizona Regents College entrance requirements. The four-year plan at AAEC requires students to take:

English	4 Credits
Math	4 Credits
Lab Science	3 Credits
World Geo./World His.	2 Credits
US History	1 Credit
Government/Econ.	1 Credit
Economics	.5 Credits
Fine Art/CTE	1 Credit
Foreign Language	2 Credits
Electives	4 Credits

Total to Graduate 22 Credits

**Required Exhibit:** (for schools offering high school grades only)

Menu of course offerings including course titles and brief descriptions.

## **Agriculture Department**

### **Introduction to Agriculture 1-2 (crs. #411/412)**

**1 Science (Laboratory)**

This laboratory science course introduces students to agriculture and a broad spectrum of basic agricultural science principles. Topics presented include the development and impact of agriculture, definitions of agriculture related fields, an introduction to FFA, and agriculture careers. Students will also be instructed in scientific method, the metric system, and proper use of lab equipment. Fields of science that will be presented include geology, soil science, plant science, animal science, fiber science, food safety, and natural resources. Students will also be introduced to chemistry, data analysis, and physics. Laboratory sessions will be performed with corresponding units. Students will be introduced to different types of Supervised Agricultural Experiences (SAEs), as well record keeping practices to document and record progress in SAE projects. Students will work to develop business writing, resume writing, decision making, team building, and leadership skills. The development of a satisfactory Supervised Agricultural Experience (SAEs) will be an integral component of the class, and all students will be encouraged to build an ongoing SAE project.

### **Animal Production Systems 1-2 (crs. #504/505)**

**1 Elective/CTE Credit**

This course is designed to provide an overview of the field of Animal Science. The importance and development of Animal Science will be primary topics; as well as general aspects of animal science such as animal classification, animal nutrition, and animal health management. Discussion topics will also include an overview of types and breeds of animals used for production of food and fiber. Specific emphasis will be placed on sheep, swine, beef, dairy and poultry. Students will also be exposed to different careers available in the field of animal science. Instruction in Leadership through the FFA and Supervised Agriculture Experience (SAE) programs are an integral part of instruction.

### **Livestock Evaluation 1-2 (crs.# 508/509)**

**1 Elective/CTE Credit**

Course involves the practical application of livestock evaluation criteria and methods used in judging production livestock species (beef cattle, sheep, hogs, and meat goats). Classes will overview commercial breeds of livestock, livestock animal anatomy, standards for evaluating live animals, quality/yield grading of market animals and selection criteria of breeding animals. Emphasis is placed upon the ranking of animals to set standards, and the oral defense of those rankings. Course participants are eligible for competitive opportunities.

### **Advanced Livestock Evaluation 1-2 (crs.# 510/511)**

**1 Elective/CTE Credit**

Advanced course required for those students desiring to pursue additional competitive livestock judging and evaluation. Market livestock emphasized include beef cattle, sheep, swine, and meat goats. Students are introduced to common types of production methods and practices, and will practice sire and dam selection. Students additionally review general livestock animal production and management principles for Career Development Events (CDE).

### **Plant Science 1-2 (crs.# 614/615)**

**1 Elective/CTE Credit**

This course emphasizes the vital role of plant science in our everyday lives. Areas of instruction will include Plant Growth and Development, Soil Science, as well as Crop Production and Management. Various topics to be covered include photosynthesis, respiration, plant propagation, plant pathology, organic farming, crop identification, hydroponics, and an introduction to landscaping. Students will learn the principles of plant science while working in a greenhouse, garden or even through a landscaping SAE project. This course will meet both AZ State Science Standards as well as standards for Agriculture education. Instruction in Leadership through the FFA and Supervised Agriculture Experience (SAE) programs are an integral part of instruction.

### **Plant Science 3-4 (crs.# 616/617)**

**1 Elective/CTE Credit**

The objective of this course is to introduce student to the world of soil science and the concepts that comes along with soil texturing, soil formation, and principles of Landscape Design. Plant Science 3 will present a broad spectrum of different topics covering a higher level of science standards and include soil characteristics classification, soil fertility, farming, soil material and soilless plant production. Students will be introduced to chemistry, physiology and data analysis in this course. Plant Science 4 will concentrate on principles of landscape design, designing irrigation for landscaping, landscape care/maintenance, and commercial landscape design.

**Beginning Horsemanship (1 Semester) (crs.# 506/507)**

**.5 Elective/CTE Credit**

The objective of Beginning Horsemanship is to introduce the students to basic skills of horsemanship. Students will be introduced to basic horse anatomy and conformation, as well as different performance breeds. Students will concentrate on developing and learning basic skills such as safe handling, catching, grooming, saddling and bridling a horse. Students will also learn how to control and guide a horse through the basic gaits of walking, trotting, (jogging), and cantering (loping).

**Intermediate Horsemanship (1 Semester) (crs.# 522/523)**

**.5 Elective/CTE Credit**

The objective of Intermediate Horsemanship is to allow students to practice and develop equitation skills. Students will concentrate of developing and improving control and execution of both natural and artificial aids, collections and control, and interpreting horse behavior. Students will also be introduced to more advanced equitation maneuvers and patterns as they are encouraged to develop skills useful for training and showing horses.

**Equine Science 1-2 (crs.# 514/515)**

**1 Elective/CTE Credit**

Course introduces students to a broad spectrum of topics in Equine Science to establish a solid foundation in general horse knowledge, and then continues into a study of the Equine Industry. Lectures in Equine Science 1 cover the development, domestication, and use of the horse; as well as economic impact and future trends of the horse industry. Major emphasis is placed upon breeds, disciplines, basic anatomy, colors, markings, conformation, gaits, teeth and age determination, hoof anatomy and care, equine behavior, and considerations for selection. Equine Science 2 explores the size and scope of the equine industry, different components of the horse market, as well as different business aspects and career opportunities within the horse industry.

**Equine Science 3-4 (crs.# 516/517)**

**1 Elective/CTE Credit**

Course introduces various aspects of equine health management including disease prevention and nutrition. Equine Science 3 covers principles of disease and disease transmission, as well as the immune and disease resistance. Topics also include common disorders of the horse, as well as immunization protocols and treatment. Methods of health assessment, common guidelines for illness detection, parasite control, and first aid will also be discussed. The unique digestive anatomy and physiology of the horse, as well as the role nutrition plays in the management and production of horses is emphasized in Equine Science 4. Proper nutrient requirements, sources, commonly used feedstuffs, feed formulation and ration balancing are discussed, as well as recommended feeding practices.

**Equine Science 5-6 (crs.# 518/519)**

**1 Elective/CTE Credit**

This course involves an advanced study of production and performance practices in Equine Science. Equine Science 5 examines the comparative reproductive anatomy and physiology of livestock and equine species. Topics presented include reproductive efficiency, reproductive anatomy/physiology, breeding management of the stallion and broodmare, and practical applications of artificial insemination and embryo transfer. Equine Science 6 involves investigation of the scope of Equine Sports Medicine (ESM), various competitive events for horses, significant risks and injuries to the equine athlete, and criteria used for selection of performance prospects. The course concentrates on exercise physiology, and will cover relevant body systems, lameness issues and factors affecting athletic performance

**Horse Evaluation 1-2 (crs.# 526/527)**

**1 Elective/CTE Credit**

Introductory course designed to familiarize students with the basic principles, criteria and methodology of horse judging. Breed, conformation, and performance standards are used to teach evaluation of competitive stock horse breeds, as well as Arabian, Morgan, Hunter, and Saddlebred horses. Emphasis is placed upon the critical evaluation and subsequent ranking of horses, presentation of oral reasons and guidelines for competitive horse judging. Course participants are eligible for competitive opportunities.

**Advanced Horse Evaluation 1-2 (crs.# 528/529)**

**1 Elective/CTE Credit**

Advanced course required for those students desiring to pursue additional competitive horse judging opportunities. Students review evaluation criteria and standards for judging both conformation and performance classes for stock, English, and hunter type horses. Emphasis is placed upon learning additional events (i.e. Western Riding, Reining, Pleasure Driving, Country Pleasure, and Hunter Hack), as well as further development of oral reasons. Students additionally review general horsemanship and horse management principles for Career Development Events (CDE).

**Applied Genetics (crs/# 534)**

**1 Elective/CTE Credit**

This is an advanced course in the practice and application of basic concepts of genetics and heredity in livestock production. Class includes a review of relevant topics such as meiosis, understanding chromosomes, Mendelian genetics, and principles of phenotypic expression. Discussion will also include gene frequencies and principles of selection (qualitative and quantitative genetics). Additionally, students have the opportunity to apply information from lecture to practice sets of problems representative of animal/livestock production scenarios.

**Introduction to Veterinary Science 1-2 (crs.# 502/503)**

**1 Elective/CTE Credit**

Course introduces students to an overview of Animal Science and Veterinary Medicine. Primary topics include the importance and development of Animal Science, as well as general aspects of animal welfare, animal classification, nutrition, and animal health management. Students also preview academic curricula and opportunities for a degree/career in veterinary medicine. Emphasis will be placed upon the introduction of different careers available in animal health care; as well as the prerequisites and qualifications for admission into professional veterinary medical programs. Additional topics include an introduction to principles of disease, basic diagnostic procedures, professional vocabulary, animal welfare, and veterinary ethics.

**Animal Anatomy & Physiology 1-2 (crs.# 512/513)**

**1 Elective/CTE Credit**

Course involves the study of the structure and function of mammalian physiology, and especially livestock animals (horse, cattle, sheep, and swine). Topics include an introduction to the field of comparative anatomy and physiology; a review of cells and life processes; primary tissues; temperature regulation; body fluids and water distribution; blood and the cardiovascular system; principles of locomotion; skin and associated structures; nervous system and sensory perception; reproduction and endocrine system; digestive system; respiratory system; kidney function and the urinary system.

**Animal Diseases 1-2 (crs.# 520/521)**

**1 Elective/CTE Credit**

The objective of this course is for the student to understand the principles of disease, concepts of preventive medicine, causes of disease and diagnostic practices. Lectures will also include the role of nutrition and parasite management. Diseases of various species will be discussed in a systematic manner so the student will be able to recognize those most commonly seen. Primary species to be studied include dogs, cats, horses, cattle, sheep/goats, swine, avian, reptiles, pocket pets and exotics. An emphasis is made on zoonotic diseases and agents used in bioterrorism to give the student a look at global issues.

**Clinical Veterinary Techniques 1-2 (crs.# 535/536)**

**1 Elective/CTE Credit**

This course presents procedures in veterinary medicine and provides students the opportunity to develop practical skills. Material presented will include an introduction of components seen in the day-to-day management of a veterinary hospital including history taking and records, physical exams, triage, medical emergencies, care and restraint techniques, laboratory procedures, bandage and cast applications, surgical preparations, nursing care, and veterinary office management.

**Natural Resources 1-2 (crs.# 441/442)**

**1 Elective/CTE Credit**

Natural Resources will introduce students to natural resources, biodiversity, ecology, and wildlife. The course will present a broad spectrum of different subjects covering natural resources, conservation, and ecology. Topics presented include the development and impact of humans on the environment and wildlife. Students will also be instructed in sustainable resources and proper use of soil and water testing equipment. Fields of science that will be presented include geology, soil science, plant science, animal science, ecology, and natural resources. The course will conclude with presentations of topics relating to current environmental issue in the state of Arizona. Laboratory sessions will be performed along with corresponding units.

**Agribusiness 1-2 (crs.# 551/552)****1 Elective/CTE Credit**

This course emphasizes the vital role of Agribusiness in every sector of national and international economies. Areas of instruction will include foundations of economics, both micro- and macroeconomics, global economics and personal finance. This course will meet both AZ State Standards for economics as well as standards for Agriculture education. Instruction in Leadership through the FFA and Supervised Agriculture Experience (SAE) programs are an integral part of instruction. Students will learn the principles of economics while creating a business plan, designing facilities, and operating a school or home based business. Students will create budget, and spread sheets using Excel, write resumes and compile a personal portfolio.

**Internship (crs.# 601)****1 Elective/CTE Credit**

Internships are available to provide students the opportunity to explore career interests in a real-life setting with real-life responsibilities. Student interns work for businesses/organizations in various industry sectors to develop vocational skills, apply knowledge gained from classes, and to investigate opportunities in their interest field. Different internships include Ag-Discovery (USDA/APHIS sponsored plant science/animal science/veterinary science summer program), Animal Science - Industry (i.e. farm management, commercial agriculture business marketing, horse trainer/instructor, event facilities management), Animal Science –Science (i.e. veterinary medicine, reproductive technologies, equine rehabilitation therapies, aquaculture, research assistant), or Plant Science (i.e. agronomy, soil conservation, turf management, citrus management).

**English Department**

Students may be enrolled in Advanced English classes based upon excellent testing scores and/or faculty recommendation. Any student in Advanced English should be prepared for additional rigor and responsibility for the course work. The class expectations include material which is more academically challenging, increased student responsibility for deeper mastery of subject material, and individual accountability for in-depth discussions and quality of written work. Students should demonstrate a strong desire to improve proficiency in reading, writing, speaking, and critical thinking.

**English 1-2 (crs.# 111/112)****1 English Credit**

Students will explore contemporary young adult fiction, contemporary classics, and be given an overview of literature from other cultures and lands. Students will learn about themselves through the struggles and triumphs of literary characters. Basic grammar skills will be reinforced on a weekly basis, and students will compose a variety of personal writing and written responses to literature. Students will strengthen their vocabulary through challenging reading. Students are required to complete independent reading using novels and non-fiction works of their choice.

**English 3-4 (crs.# 121/122)****1 English Credit**

Students will explore the literary roots of Western Civilization beginning with the ancient Greeks and ending with contemporary British classics. In addition, they will survey significant development in philosophical thought in Europe. Students will analyze and evaluate literature including drama, poetry, fiction, and non-fiction. Students are required to complete independent reading using novels and non-fiction works of their choice.

In order to be able to effectively express their ideas in written form, as well as to prepare for the AIMS Writing Test, all sophomores will write extensively during English 2. Students learn to follow a systematic approach during the writing process: prewriting, rough draft, peer editing, rewriting, teacher conferences, and final copy. Types of writing include narrative, descriptive, and persuasive essays, which are evaluated using the Six-Trait-Analytical Writing Rubric. Following AIMS testing, time is devoted to creative writing and research.

**English 5-6 (crs.# 131/132)****1 English Credit**

Students study many of the classics of American Literature from Native American writers to contemporary authors. Whenever possible, novels that illustrate distinctive eras of American history are chosen. Students are challenged to develop and utilize critical thinking skills during class discussions and debates. Vocabulary building is stressed as a way of improving reading skills. Grammar is taught in conjunction with writing, which provides an opportunity for students to respond to questions that are raised in class. During the second semester, students are required to write a research paper during the second semester of English 3.

**English 7-8 (crs.# 141/142)****1 English Credit**

This class for seniors concentrates on the study of World Literature. Students analyze characters, settings, and themes found in a wide variety of cultures. Many of these novels have personal applications for students' lives. Films are used to provide another genre by which to evaluate issues such as love, war, and friendship. Written assignments and class discussions reinforce the understanding of the materials studied and allow students to express their opinions. Vocabulary is studied in context during oral reading and separately in preparation for standardized tests like SAT.

**Academic Enrichment (crs.# 100)****.5 Elective Credit**

All freshmen and sophomores benefit from the opportunity to enhance their reading ability. Improving their fluency, vocabulary, and comprehension not only assists students in passing the AIMS Reading Test, it is basic to the understanding of all other course materials. Reading skills systematically studied in this class include Vocabulary in Context, Main Ideas, Supporting Details, Fact and Opinion, Inferences, Purpose, Tone, and Argument. Each unit involves an explanation of the particular skill being studied followed by exercises and mastery tests. Readings are usually short nonfiction passages.

Note: Please see the list of materials which instructors may choose from for each level of English.

**Yearbook (crs.# 606/887)****1 Elective Credit**

Yearbook is a yearlong course wherein its students are involved in the many phases of designing, creating, editing, and promoting their own high school yearbook. This includes opportunities for learning desktop publishing, photography, original cover design, journalistic editing, as well as leadership, since students will work with a team of their peers. Yearbook participants are also expected to manage meeting the deadlines that come with publishing quality material, give time outside of class to complete the publication, and assist in promoting/selling their yearbook to the student body. The yearbook class does not require prior experience, but interest in any of the above listed opportunities is helpful. All high school grade levels are encouraged to enroll in the class so as to create a yearbook that represents the whole student body (9<sup>th</sup>-12<sup>th</sup> grades).

**Math Department****Algebra 1-2 (crs.# 311/312)****1 Math Credit**

This course will help students build their conceptual understanding of algebra content while practicing necessary fundamental skills. This course will study the following concepts:

- algebraic language and applications
- development of the real number system
- variables
- mathematical expressions
- linear equations
- inequalities
- problem solving
- polynomials
- special products and factoring
- graphs, relations and functions
- quadratic equations
- rational and radical expressions
- basic statistics and probability

The goal of this course is to prepare a solid foundation in algebra for the students to draw upon in order to secure a smooth transition to higher levels of mathematics. The teaching techniques include input, modeling, checking for understanding and guided practice. Students will participate in activities that enhance their understanding of new topics, and/or provide an additional opportunity to practice new skills.

**Geometry 1-2 (crs.# 321/322)****1 Math Credit**

This course provides a solid skill base and understanding of

- formal geometric proofs
- polygons
- circles
- coordinate geometry
- congruency
- similarity
- right triangle trigonometry
- Euclidean transformations
- mathematical structure and logic

The purpose of this course is to introduce students to the Pythagorean and Euclidean theory; two-dimensional and three-dimensional objects, basic shapes and how they interact with each other. Students will develop a foundation in deductive reasoning and problem solving through an emphasis on critical analysis as well as demonstration of key soft skill behaviors. Geometry will help enhance critical thinking abilities as well as understanding of logic and structure.

**Algebra 3-4 (crs.# 331/332)****1 Math Credit**

This course will provide a solid skill base and understanding of algebraic concepts through practice and development of critical thinking in such topics as order of operations, properties of the real number system, emphasizing solution techniques for linear, absolute value, radical, and rational equations.

This course also covers solution techniques for

- polynomial equations
- properties of functions
- logarithms and exponents
- coordinate geometry
- complex numbers
- arithmetic and geometric sequences and series
- introduction of trigonometry and its applications.

Students will be expected to graph the solutions with or without help of graphing calculator. Technology will play a part in this course, especially hand-held scientific calculators.

**Applied Mathematics 1-2 (crs.# 343/344)****1 Math Credit**

This course introduces the practical application of mathematics using problem-solving strategies and math skills as related to everyday consumer situations. The following concepts are included:

- real world applications involving fractions, decimals, percents, tables and graphs
- probability, including normal probability models
- statistics, including descriptive measures, distributions, estimation, hypothesis testing, correlation, and regression analysis
- solution of problems related to topics such as personal finance, interest, taxes, and investments

Instruction will focus on mathematics content as reflected in the State Mathematics Standard in conjunction with test-taking strategies.

**Advanced Mathematics 1-2 (crs.# 341/342)****1 Math Credit**

This course is designed to provide students with the mathematical background necessary to meet college entrance requirements. Students will continue to explore the concepts introduced in Algebra 3-4 by applying deductive reasoning and solve problems through an emphasis on critical analysis.

This course will provide a solid skill base and understanding of pre-calculus concepts in algebra and trigonometry that will be used in future college math courses as well as courses in the social and natural sciences.

Topics covered include:

- comparing data sets using graphs and summary statistics with or without technology
- expressing and solving problems that can be modeled using linear, quadratic, logarithmic, exponential, cubic, reciprocal, absolute value, step and other piecewise-defined functions
- interpreting solutions in terms of the context
- trigonometric functions and identities
- conic sections
- sequences, series, and combinatorics

Students will be expected to graph the solutions with or without help of a graphing calculator. Technology will play a part in this course, especially hand-held scientific calculators.

### **Science Department**

#### **Biology 1-2 (crs.# 421/422)**

#### **1 Lab Science Credit**

Biology is a laboratory course focusing on the following themes of Biology: the nature and history of science as a human endeavor, the chemistry of living things, cellular structure and function, energy systems of living things, cellular reproduction, heredity, evolution, the interdependence of organisms, and human systems. Biology provides an understanding of life and life processes. Students will investigate the nature of biology and the concepts and principles applicable to living things by performing laboratory activities related to each unit of study. The goal of this course is to provide a basic introduction to biology with an emphasis on biochemistry and molecular cell biology, and to prepare students for college level biology.

Students in Biology will:

- Formulate predictions, questions, or hypotheses based on observation
- Design and conduct controlled investigations
- Evaluate experimental design, analyze data, and communicate results
- Understand the roles of cells and cellular processes
- Understand organization of living systems, and the role of energy within systems
- Understand the molecular bases of heredity and resulting genetic diversity
- Understand scientific principles and processes involved in biological evolution
- Analyze the relationships among various organisms and their environment

#### **Chemistry 1-2 (crs.# 431/432)**

#### **1 Lab Science Credit**

Chemistry is a physical science course that teaches students to understand and visualize the world around them at the atomic level. Students should have already taken and passed Algebra with a C or better, since Chemistry focuses on quantifiable relationships between matter and energy. Topics covered include lab practices and scientific method, history and development of chemistry, quantum structure, mole relationships and stoichiometry, reaction types and predicting products, gas laws, thermochemistry and nuclear chemistry. Students may be required to keep a lab notebook and may be required to do projects or research papers as part of the class. Experiments are used to introduce the principles of chemistry.

#### **Methods of Inquiry 1-2 (crs.# 648)**

#### **1 Elective Credit**

The Methods of Inquiry course will introduce students to the inquiry process. Students will use various processes like questioning, planning and conducting investigations, using appropriate tools and techniques to gather data, thinking critically and logically about relationships between evidence and explanations, and communicating results. Topics will include: the methods of forming observations, questions and hypothesis, designing and conducting controlled investigations, evaluating experimental design, analyzing data to explain results and propose further investigations. Students will also learn the proper methods to communicate investigation results.

#### **Human Anatomy and Physiology (crs.# 540)**

#### **.5 Elective Credit**

Anatomy and Physiology cover the basics of human anatomy and physiology including anatomic terminology, basic biochemistry, cells, cell processes and tissues, and the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic/immune, respiratory, digestive, urinary and reproductive systems. Anatomy and physiology also introduces common human disease processes.

**Social Studies Department**

**Global Studies - Geography 1-2 (crs.# 211/212)**

**1 World Geography Credit**

World Geography is the study of the world's peoples, places, and environments, with a focus on world regions. In this course students will learn what life is like in other parts of the world. Particular emphasis is placed on students' understanding and applying geographic concepts and skills to their daily lives, such as reading maps, graphs, etc. and valuing cultures throughout the world.

**World History 1-2 (crs.# 221/222)**

**1 World History Credit**

The course provides an overview of the history of the world. While European history is emphasized, ancient civilizations and significant African and Asian nations are studied. Emphasizing place, time and significance, the course will show the continuity of history and the sweeping forces that shaped events and influenced each era of history. The course begins with the prehistoric period and ancient civilizations. The first semester ends with the Renaissance. The second semester begins with Absolutism and the French Revolution and the semester ends with the Cold War.

**US History 1-2 (crs.# 231/232)**

**1 US History Credit**

This course examines the history of the United States beginning with Pre-Columbian Native cultures of the North American continent, through colonization, revolution and the development of a constitutional democracy. Students will develop a greater understanding of how the United States developed through westward expansion, compromise, and conflict. After studying the Civil War and Reconstruction the course examines the emergence of the modern United States into a world power through the Great Depression, WWII, and the post war era. In addition contemporary issues affecting the United States will be explored. Throughout the course Arizona history will also be explored.

**Economics/Free Enterprise (1 Semester) (crs.# 242)**

**.5 Economics/Free Enterprise Credit**

This course familiarizes students with the foundations of economics and the application of basic economic concepts and decision-making skills. Students will develop a greater understanding of the foundations of economics such as scarcity and the different methods of allocating goods and services. Both microeconomics, which examines the costs and benefits of economic choices relating to individuals, markets, industries, and governmental policies, and macroeconomics, which examines choices made at a societal level and how those choices affect overall economic well being will be explored. In addition global interactions and various economic systems will be studied. Close attention is given to the individual as a consumer in our economic system, with topics focusing on consumer protection, money management, and consumer credit.

**American Government (1 Semester) (crs.# 241)**

**.5 American Government Credit**

This course is designed to develop a more profound understanding of and appreciation for the fundamental principles and values of our free society. It focuses on the common core of civic values and concepts that are fundamental to the theory and practice of democratic citizenship in the United States. The fundamentals of government on the national, state and local levels will be examined, including the three branches of government, rights and responsibilities of American citizenship, and the development and role of political parties. This course involves both the study of general concepts on laws and policies developed to govern protect and promote the well being of the people, and different governmental systems that exist throughout the world.

**Application Portfolio**  
**Operational Plan Narrative**

10-1. Describe the organization's strategic growth plan and desired outcomes over the next five years in Arizona. Include: number of schools with grades served including expansion progression, projected opening dates, and projected number of students served.

**Growth Strategy** One of the AAEC's strategic goals has been to replicate its initial model in other targeted geographic locations in the Phoenix metropolitan area (AAEC has placed its existing campuses on all sides of the Phoenix metropolitan area). AAEC has opened campuses when population growth supports demonstrated demand and where land has become available, at reasonable comparable market values, adjacent to the current Maricopa Community Colleges. Given its community college emphasis, the AAEC believes that proximity to community college campuses is necessary to allow students to transition seamlessly into a community college. The Borrower seeks to leverage resources at the community colleges — 100% of the AAEC's students are enrolled in, at a minimum, one community college course. This allows students to utilize the library and technology resources at the community college, and lowers the overall operational costs of the AAEC's program. AAEC also believes this arrangement provides the best educational opportunity for its students.

In 2011, AAEC began to expand beyond Maricopa County to appropriate outlying areas — initially the Town of Prescott Valley in Yavapai County, where the Prescott Valley Campus is located. AAEC believed this was a desirable location because of the growth in the area and the existence of Yavapai Community College, which has shown a willingness and desire to create a partnership with AAEC. In 2012 AAEC built a permanent facility for the Paradise Valley Campus. AAEC believed the new location for the Paradise Valley Campus was desirable due to its proximity to Paradise Valley Community College. AAEC is now looking at expansion to the Mesa Community College location which mirror's the current population and demographics of the AAEC South Mountain Campus. AAEC South Mountain is currently showing significant growth and continues to perform as well as the other four campuses that reside in higher socio economical areas.

While there are no concrete plans for further expansion to other areas besides Mesa, AAEC is continually exploring opportunities for expansion into areas that would meet the conditions and core components of the model it has implemented at its other five locations. More generally, factors that AAEC considers important in making a decision to expand include the following:

- Strong community support for AAEC;
- The need for additional space in its facilities to grow its enrollment and program offerings;
- The Schools remain the only schools in Arizona that provide students with an average of 46 community college credits by the time they graduate;
- Ongoing overcrowding in comprehensive high schools, combined with the AAEC's "small school" concept; and

- AAEC's belief that it has and is perceived as having an effective model, which is effective regarding of the socioeconomic status of the surrounding community, as demonstrated consistently through its students' standardized test scores and accumulated community college credits.

10-2. Summarize the organization's capacity to support the quality and long-term academic and operational success and financial viability of the replication school, and proposed growth of the school over the next three years

#### Academic Success:

AAEC-Mesa will invest in high quality faculty and administrators and provide continuous coaching and ongoing professional development of our teachers and school leaders. The Observation/Evaluation Process occurs two times for each teachers. These observations are recorded in a database and are tracked to monitor identified areas of refinement and reinforcement so we can target specific teacher needs in upcoming professional development and to identify staff who can teach others specific instructional strategies from their classrooms. Through the teacher evaluation scores, we also will measure the correlation between observations/evaluations and student achievement gains. This data provides another source of dialogue between administration and teachers, thus improving the teacher's efficacy and performance in the classroom. All teachers will participate in both district and site professional development, which increases collaboration across our five campuses and provides a shared pool of knowledge and resources. Sustained academic success will involve AAEC-Mesa's commitment to support the shared AAEC mission through a model of continuous improvement that involves all stakeholders in the process of reviewing data, providing feedback, and working collaboratively to ensure high levels of achievement for all students, regardless of income or ability. The state academic standards will also be incorporated in student assessments and methods of evaluation. Teachers will monitor student's progress closely to track mastery levels of each performance objective, and to further address areas where students need improvement. Multiple methods of assessment will be utilized to monitor student progress and demonstration of proficiency.

#### Operational Success:

In addition to a focused support of academic programs, AAEC Mesa will monitor operational components as part of our ongoing assessment process. Initially, marketing and student enrollment will be a primary focus with a secondary focus on parent involvement. Within the first three years of the school's opening, our marketing efforts will be supported by a strong community involvement and word-of-mouth as well as social media targeted campaigns. An additional component of our initial efforts will include open house style informational/open enrollment meetings supported by targeted advertising and direct marketing. The school will be able to provide for purchases, furniture and technology because they will not be purchased or replaced simultaneously or in large quantities. It is anticipated in subsequent years that the AAEC will qualify for Federal and State Title Grants (Title I, Title II, CTE and IDEA). The increased enrollment will allow for

economies of scale take effect. Being knowledgeable about funding sources is an important factor in securing additional funds.

10-3. Discuss your operational capacity to open and operate schools successfully, including lessons learned from past expansion, and how you plan to avoid or minimize challenges in the replication school:

#### Operational Capacity:

AAEC has opened and is continually operating five successful campuses. All five schools are "A" rated schools. Challenges to increasing student achievement at our expansion campus are similar to challenges faced at our existing schools, including its comparable AAEC-South Mountain High School: teacher quality, customizing student learning, family engagement, and community support. Our continual assessment of our programs will address these components with efficacy and thoughtfulness through timely reviews and implementation of targeted supports.

Regardless of the community in which an AAEC campus resides, the students perform uniformly. AAEC, as of date, does not have an achievement gap. AAEC only grows as large as the integrity of the program can be maintained. AAEC's instructional staff meets all the highly qualified requirements and any additional state qualifying requirements. Throughout the year AAEC not only does cross curricular activities within each campus but core content teachers from all five campuses come together on a regular basis to discuss best practice techniques and consistency through out the campuses. Curriculum is reviewed and updated as needed to reflect the current standards by the educational staff. This method has allowed AAEC to maintain its current high academic standards and operations. It appears that as we grow we improve with every expansion. Having a solid direction and growth plan has helped AAEC focus on where we want to go.

Proposed cross streets are Dobson and Southern AVE. in Mesa, AZ

D.2-2. Describe the facility size and layout suitable for implementing the Educational Plan: The Facility size is approximately 6000 sq.ft. with 5 classrooms, 2 offices, a multipurpose room and 2 bathrooms. (The architectural layout is not available at this time). AAEC will lease space for the next five years. Once the lease is completed AAEC will purchase property adjacent to its current location to build a facility.

D.2-3. Describe the timeline for acquiring a suitable facility by the start date identified in Section 7.

AAEC is currently in negotiations with the real estate agent to be acquired by August 2016.

	A	B	C	D	E	F
1	<b>Applicant Name: Arizona Agribusiness &amp; Equine, Inc. - Mesa Campus</b>					
2						
3						
4	<i>Provide Assumptions by Line</i>					
5	<b>START-UP REVENUE</b>					
6	Secured Funds - Private Donations					
7	Secured Funds - Loans					
8	Secured Funds - Other (AAEC, Inc.)				\$ 235,000	1
9	Total Start-up Revenue				\$ 235,000	
10						
11	<b>Administration, Instruction, &amp; Support (AIS) EXPENDITURES (add lines as necessary)</b>					
12	Salaries					
13	Director/Principal	0.33	\$ 62,000		\$ 20,460	2
14	Teacher-Regular Education	0.33	\$ 42,000		\$ 13,860	2
15	Teacher-Special Education				\$ -	
16	Clerical	0.33	\$ 34,000		\$ 11,220	2
17	Bookkeeper/Finance	0.05	\$ 34,000		\$ 1,700	2
18	Custodial/Maintenance				\$ -	
19	Other				\$ -	
20	Employee Benefits				\$ 9,400	3
21	Employee Insurance (if providing)				\$ 4,100	4
22	Office Supplies (Paper, Postage, etc.)				\$ 1,000	5
23	Instructional Consumables					
24	Membership Dues, Registrations, & Travel					
25	Contracted Services: AIS				\$ 2,000	6
26	Contracted Services: Special Education					
27	Curriculum & Resource Materials					
28	Library Resources/Software					
29	S AIS Software				\$ 500	8
30	Other					
31	<b>Total Administration, Instruction, &amp; Support</b>				\$ 64,240	

	A	B	C	D	E	F
32						
	<b>Operations &amp; Maintenance (O&amp;M)</b>					
33	<b>EXPENDITURES</b> (add lines as necessary)				<b>Total \$</b>	<b>Assumption #</b>
34	Supplies				\$ 500	5
35	Marketing/Advertising				\$ 5,000	9
36	Contracted Services: O&M (Janitorial)				\$ 2,000	5
37	Building Rent/Lease/Loan				\$ 50,000	12
38	Building & Improvements				\$ 10,000	8
39	Land & Improvements					
40	Fees/Permits					
41	Property/Casualty Insurance				\$ 4,000	7
42	Liability Insurance				\$ 1,000	7
43	Utilities (Electric, Gas, Water, Waste)				\$ 5,000	5
44	Phone/Communications/Internet Connectivity				\$ 1,000	5
45	Student Furniture & Equipment				\$ 25,500	10
46	Office Furniture & Equipment				\$ 5,000	5
47	Student Technology Equipment				\$ 38,000	11
48	Office Technology Equipment				\$ 3,000	5
49	Other Leases (Security, Copiers, etc.)					
50	Loan Repayment					
51	Other					
52	<b>Total Operations &amp; Maintenance</b>				\$ 150,000	
53	<b>Total Expenditures</b>				\$ 214,240	
54						
55	<b>Total Start-up Revenues</b>				\$ 235,000.00	
56						
57	<b>Budget Balance (= Revenues - Expenditures)</b>				\$ 20,760.00	

**Arizona Agribusiness & Equine Center, Inc. - Mesa Campus**  
**Assumptions for Start-Up Budget – August 2016**

1. Based on total funds needed prior to opening and receiving funds on August 1. AAEC, Inc. has this amount and more in cash reserves to provide operating funding from inception to opening for the Mesa campus.
2. The annual salary for these positions is based on salaries of our other campuses. The FTE is for four months which we have found is sufficient to staff and furnish the campus prior to August 1.
3. Employee benefit taxes are based on 20% of salaries, which includes OASI, Medicare, ASRS contributions and LTD premiums, workers' compensation and unemployment insurance.
4. Employee medical insurance will be provided and is based on the current AAEC-provided single coverage of \$341 per month for four months for three employees.
5. Expense is based on new purchases or services for four months as needed based on historical trends at existing campuses. Current inventory of AAEC supplies and equipment at district would supplement when needed.
6. Amount of contracted special education consultation services is estimated to supplement existing AAEC staff that will assist with establishing fully compliant special education program at the Mesa campus.
7. Estimate of insurance expenses is pro-rata for four months, based on other campuses, which average \$15,000 annually per campus.
8. Synergy software is purchased through ETC Consortium and costs about \$500 per quarter for a small campus.
9. Estimated 10% portion of AAEC's overall annual marketing consultation and activities that totals \$50,000.
10. Student furniture and equipment is based on \$300 per student for the 85 expected students in year one.
11. Student Technology is based on creating a computer lab with 25 stations, server and cabling.
12. Building lease estimate is for a five year lease based on \$25/sq. ft. (including tenant improvements) for 6,000 sq. ft. for four months.





**Arizona Agribusiness & Equine Center, Inc. - Mesa Campus**  
**Assumptions for Three Year Budget – August 2016**

1. Projected student counts are anticipated to be low at first, then slowly increase to the expected maximum of 165.
2. A conservative per student amount of \$6,800 is used. There is no expectation of Prop 123 monies in the budgets at this time.
3. The annual salary for these positions is based on salaries of our other campuses. The FTEs for teachers is based on the student count for each year.
4. Employee benefit taxes are based on 20% of salaries, which includes OASI, Medicare, ASRS contributions and LTD premiums, workers' compensation and unemployment insurance.
5. Employee medical insurance will be provided. The current AAEC-provided single coverage is \$341 per month. Year one anticipates an increase to \$350, year two \$375 and year three \$400.
6. Expense for purchases or services is based on historical trends at existing campuses.
7. Building lease estimate is for a five year lease based on \$25/sq. ft. (including tenant improvements) for 6,000 sq. ft.
8. AAEC, Inc. has this amount and more in cash reserves to provide operating funding as needed to ensure financial success in year one, and continuing years if needed.
9. Student technology is increased each year as student count increases, and the need for replacement units arises.