

## Student Achievement Outcomes

AUM Office of Institutional Effectiveness

## Student Success

Auburn University Montgomery (AUM) evaluates success with respect to student achievement consistent with its mission. The AUM mission in the 2019-2024 Strategic Plan (page 1) is as follows:

The mission of Auburn University at Montgomery is to provide quality and diverse educational opportunities at the undergraduate and graduate levels through the use of traditional and electronic delivery systems, and to foster and support an environment conducive to teaching, research, scholarship, and collaboration with government agencies, our community, and other educational institutions.

From the most comprehensive measures used across the university, such as course completions and a variety of testing administered in the core curriculum, to academicschool and department measures, the university regularly and carefully monitors and facilitates continuous improvement student success and achievement for all levels of students and all delivery systems, relative to the mission of the University.

## UNIVERSITY-WIDE STUDENT ACHIEVEMENT

The measures and processes that are used to indicate achievement of all Auburn University at Montgomery students include:

- Retention Rates
- Program Degree Completions
- Graduation Rates
- Monitoring Retention and Graduation Rates
- Successful Course Completions
- Job Placements
- Student Learning Outcomes Assessment -
- Core Curriculum Testing
- Program Related Assessments and Licensure -
- College and Department Student Achievement
- Further Resources


## Retention Rates

# c) <br> AUM achieved the retention goal established for the Strategic Plan for 2015-2016 through 2018-2019 first year undergraduate cohorts as shown below. 



The Strategic Plan 2019-2024 (page 4) sets as a goal of further significant improvement (exceeding $65 \%$ first year retention), as benchmarked by achieving national retention and graduation rates for regional comprehensive institutions.

Second Year Undergraduate Retention. Second year retention is also examined, monitored, and continuous improvement initiatives undertaken. Bachelor's degree seeking undergraduate cohort retention percentages for 2014-15 through 2017-18 are shown below.


As examples, four key specific strategic directions to further accomplish retention continuous improvement goals are:

- Increasing opportunities for student engagement and service learning on (and off) campus, within majors and across the campus;
- Refining freshman seminar course (UNIV) for a further pathway(s) into academic disciplines, programs, and the University;
- Enhancing support for students with special needs; and
- Developing and expanding initiatives to assist students with successfully articulating career readiness throughout their educational experience.


## Program Degree Completions



Compared to the previous three years (2013-14 through 2015-16), average completions at AUM have increased overall by 9\% for the most recent three years (922 compared to 845).


In keeping with AUM's mission to provide "quality and diverse educational opportunities," continued growth and successful matriculation was set as a threshold to emphasize AUM's identified core value of "commitment to constant improvement."

Graduation Rate of Bachelor's Degree Seeking Cohort. The Bachelor's Degree Seeking Cohort Six Year Graduation Rate has increased by 11.2 percentage points (from 22.6\% to 33.8\%) from 2016-2017 to 2018-2019.


Graduation Rate of Transfer Students. AUM also monitors and seeks to continually improve the graduation rate of transfer students along with freshmen, since $40.5 \%$ (as determined from Common Data Set - Fall 2018:
http://www.aum.edu/sites/default/files/Common_Data_Set_Fall_2018.pdf) of our graduating seniors started AUM as transfers (Office of Institutional Effectiveness).

The graduation rate of transfer students shows a higher success rate for students in comparing 2013 to 2014, as seen below. More specifically, the Bachelor's Degree Seeking Cohort Six-Year Graduation Rate has increased by 4.0 percentage points (from 45\% to 49\%) from Fall 2013 to Fall 2014.
AUM began to capture and monitor transfer graduation rates once graduation success rate of transfers became available.


## MONITORING RETENTION AND GRADUATION RATES

AUM monitors and strives to continually improve retention and graduation rates in keeping with its mission to "provide quality and diverse educational opportunities at the undergraduate and graduate level." In addition, the mission of AUM is the basis for AUM's core values: "promotes a student-centered experience" and "excellence as our standard". (2019-2024 Strategic Plan, page1). As reflected in the specific strategic directions highlighted on page 3, several major systemic efforts in these regards include:

AUM Enrollment Management. Reports are provided to Enrollment Management on incoming students with information showing indicators of quality, source, ethnicity, and age for both freshmen and transfers. AUM is continuing its success in retention rates for both freshmen and transfers in order to increase success in four to six-year graduation rates.

The Integrated Postsecondary Education System. Monitoring retention and graduation rates using the Integrated Postsecondary Education System shows that AUM has achieved the retention goal, or threshold of success, (at least 65\%) established for the previous strategic plan. AUM strives to continually improve even further.

Consortium for Student Retention Data Exchange (CSRDE). Going beyond meeting our threshold of success, AUM seeks to compare retention performance with similar institutions. AUM participates in the Consortium for Student Retention Data Exchange (CSRDE) as a "moderately selective" (Composite ACT score of 21 to 22.4) public institution with fewer than 5,000 students. (Note: AUM's Fall 2019 first time freshman cohort average ACT was 21.5.)

For the combined 2017-2018 and 2018-2019 cohorts, AUM's Year One retention rate average was $67.7 \%$. This is 3.3 percentage points above the CSRDE comparable timeframe comparison group rate of 64.4\% (moderately selective Master's Level Public Institutions, not including those institutions with large student populations).

Campus-wide Retention Committee. AUM has an active campus-wide retention committee in order to form and implement initiatives to impact retention rates across campus and to monitor the impacts of these initiatives. The committee has developed working groups to address suggestions produced during a series of campus-focus group meetings.

Information that is provided to the Committee to monitor the possible impacts of new initiatives includes retention/graduation rates, student satisfaction surveying, and graduating students surveying -- all of which are captured by the Office of Institutional Effectiveness.

A broad range of working subgroups, listed below, keep the retention committee informed of issues and impacts via an interactive dialogue and ongoing feedback loop.

The working groups are:

- The Campus Culture working group
- Policy Review working group
- Financial Literacy working group
- University Success Course working group
- Keep it Current (data communication) working group
- Warhawk Warning - Early Alert Program working group

Many fruitful initiatives have been undertaken as a result of close monitoring of student success by AUM's campus-wide retention committee and its collaborative network of working groups.

Warhawk Academic Success Center. AUM developed the Warhawk Academic Success Center which houses program advising and academic transition programs. The Warhawk Academic Success Center (WASC) is a physical space where students may receive academic advising and student success advising.

Through this program, faculty and staff can submit referrals to the Student Success and Retention Office for students who are struggling with academic or co-curricular challenges and for students who deserve and may receive recognition for outstanding achievements. When referrals are received for a student who needs additional support, an advisor contacts the student and connects them with appropriate services.

Warhawk Warning. Additionally, AUM initiated Warhawk Warning along with mid-term grade reporting. Under the Warhawk Warning policy, instructors are required to report mid-term grades. Advisers contact students who have multiple failing grades by telephone to help and offer them supportive services with their challenges.

## Successful Course Completions

AUM's mission highlights the need for "diverse education opportunities at the undergraduate and graduate levels through the use of traditional and electronic delivery systems"; (2019-2024 Strategic Plan, page 1); therefore successful course completions are monitored across levels and forms of instructional delivery.


In lower-level courses from 2016-2019, over 80\% of students passed irrespective of whether their course was offered in a distance (hybrid or online) format or on campus (All Cases).


Continuous improvement - lower level course completion*. For comparison purposes, the "All Years" lower level undergraduate course completion rates results for 2013-2016 online/hybrid, traditional, and all courses were, $78.7 \%, 81.9 \%$, and $81.4 \%$, respectively. Overall (all cases), the lower level undergraduate course completion rates improved by 2.4 percentage points ( 83.8 minus 81.4 ).
*For most lower-level undergraduate courses (below), a grade of A, B, C, CR, D or S is considered passing. The only exceptions are for English Composition I and English Composition II, in which a D would not be considered to be a passing grade.

> 5
> In upper-level courses from 2013-2016, over 90\% of students passed irrespective of whether their course was offered in a distance (hybrid or online) format or traditionally on campus (All Cases).


Continuous improvement - upper level course completion*. As a reference, the "All Years" upper level undergraduate course completion rates results for 2013-2016 online/hybrid, traditional, and all courses were, $88.3 \%, 93.3 \%$, and $92 \%$, respectively. Overall (all cases), the upper level undergraduate course completion rates improved by .5 percentage points ( 92.5 minus 92.0 ).
*For all upper-level undergraduate courses (below), a grade of $A, B, C, D, P$ or $S$ is considered passing.


In graduate-level courses from 2016-2019, over $90 \%$ of students passed irrespective of whether their course was offered in a distance (hybrid or online) format or traditionally on campus (All Cases).


Continuous improvement - graduate level course completion*. The "All Years" graduate course completion rates results for 2013-2016 online/hybrid, traditional, and all courses were $89.1 \%, 93.3 \%$, and $91.4 \%$, respectively. Overall (all cases), the graduate course completion rates improved by 1.1 percentage points ( 92.5 minus 91.4).
*In graduate courses, a grade is considered passing if it is an $\mathrm{A}, \mathrm{B}, \mathrm{C}$, or S .

## Job Placements

Students' post-graduation plans are captured from individual colleges across campus upon graduation. AUM's mission drives the vision statement that AUM "will be recognized as an integral community partner and a resource for the enrichment and economic development of the Southeast region and beyond." This commitment reflects the strong emphasis given to the post-graduation success of our AUM graduates.

The State of Alabama does not offer a method for tracking employment, so self-report through indirect methods is the only job placement source for AUM.

- The School of Nursing in the College of Nursing and Health Sciences reports job placement rates for students receiving a Bachelor of Nursing Science of $86.3 \%$, $85.8 \%$, and $90.1 \%$ for years 2017,2018 , and 2019 , respectively.
- Very recent College of Business voluntary "Hired Survey" participation results indicate a calculated placement rate of approximately $70 \%$ (in total, across undergraduate and graduate students). (This is consistent with the 2015-16 College of Business overall placement rate survey information of approximately 70\%)
- Students graduating from the Medical Laboratory Sciences have a job placement rate of 100\% for years 2014-15 through 2019-20.


## STUDENT LEARNING OUTCOMES ASSESSMENT -

CORE CURRICULUM TESTING

| Student Learning Outcome (SLO)* | Assessment Tool |
| :--- | :--- |
| SLO1. Students will be able to formulate <br> and support an assertion and organize <br> major ideas to defend that assertion in <br> written form. | AUM Writing Assessment |
| SLO2. Students will be able to formulate <br> and support an assertion and organize <br> major ideas to defend that assertion in <br> oral form. | Common rubric assessment across oral <br> presentations in ENG 1020 (English <br> Composition) and COMM 1010 <br> (Introduction to Human Communication) |
| SLO3. Students will be able to clarify, <br> analyze, evaluate, and extend arguments. | The California Critical Thinking Skills Test <br> (CCTST) |
| SLO4. Students will be able to use <br> quantitative reasoning to solve <br> mathematical problems. | 15 course-specific exam questions (as <br> grouped by content area) developed by <br> MATH faculty |
| SLO5. Students will be able to <br> demonstrate an understanding of <br> aesthetic, historical, philosophical, and <br> ethical issues of diverse communication. | 12 question pre- and post-exam given in <br> VISU 1000 (Art appreciation) |

*Current undergraduate SLO's as shown in the 2019-2020 undergraduate Catalog, page 49.

SLO1. Evidence supports that AUM is performing at acceptable or excellent levels on the Writing Assessment.

Writing. The AUM Writing Assessment was administered to 342 undergraduate students in 22 classes during the Fall 2019. The results in the chart below show that for each of the four rubric components, at least $90 \%$ of the students achieved acceptable or excellent. (The three rubric levels were: inadequate, acceptable and excellent.)

That is, 310 students achieved at least at the acceptable level. It is further noteworthy that the percent attaining excellent was $60.8 \%, 48.3 \%, 50.6 \%$, and $38.0 \%$ for the Focus, Content, Organization, and English conventions, respectively.


SLO2. Evidence confirms that students are able to formulate and support an assertion and organize major ideas to defend that assertion in oral form.
Oral Communication. Assessment of oral communication occurs in ENGL 1020 (and COMM 1010) and involves the use of overlapping rubrics. An assessment of 164 students in Fall 2019 demonstrates that students are meeting or exceeding the desired goal of $80 \%$ achieving at expected or greater than expected across the three areas of focus (organization [94.5\%], content [92.7\%], and delivery [93.9\%]).

While the Fall 2018 rubric was implemented on a limited basis ( $\mathrm{N}=39$ ), the results are very consistent with and further supportive of the strong student performance demonstrated by the Fall 2019 students. More specifically in 2018, the meets or exceeds percentages for organization, content, and delivery were $97.4 \%, 97.4 \%$, and $92.3 \%$, respectively.

The chart below, using the 2019 mean data, further highlights that AUM students as a group achieved substantively beyond meeting expectations.


SLO3. Evidence expresses that students clarify, analyze, evaluate and extend arguments.

The California Critical Thinking Skills Test (CCTST). CCTST measures reasoning and decision-making processes. The test was administered for the first time in the Spring 2020. A total of 320 tests, comprised of predominantly juniors' and seniors' results, were analyzed as ascertained from students participating across all the AUM colleges.

The CCTST Scale Descriptions are as follows:
Reasoning Skills Overall: The Reasoning Skills Overall score describes overall strength in using reasoning to form reflective judgments about what to believe or what to do. To score well overall, the test taker must excel in the sustained, focused and integrated application of core thinking skills measured on this test, including analysis, interpretation, inference, evaluation, explanation, induction and deduction.

Analysis: Analytical skills are used to identify assumptions, reasons, themes, and the evidence used in making arguments or offering explanations. Analytical skills enable individuals to consider all the key elements in any given situation, and to determine how those elements relate to one another. Individuals with strong analytical skills notice important patterns and details.

Inference: Inference skills enable individuals to draw conclusions from reasons, evidence, observations, experiences, or values and beliefs. Using Inference, individuals can predict the most likely consequences of the options they may be considering. Individuals with strong inference skills draw logical or highly reliable conclusions using all forms of analogical, probabilistic, empirical, and mathematical reasoning.

Evaluation: Evaluative reasoning skills enable individuals to assess the credibility of sources of information and the claims that are made. These skills are used to determine the strength or weakness of arguments. Strong skills in this area can support highquality evaluation by providing the evidence, reasons, methods, criteria, or assumptions behind the claims made and the conclusions reached.

Deduction: Deductive reasoning is rigorously logical and clear-cut. Deductive skills are used whenever individuals determine the precise logical consequences of a given set of rules, conditions, beliefs, values, policies, principles, procedures, or terminology.

Induction: Inductive reasoning relies on estimating likely outcomes. Decision making in contexts of uncertainty relies on inductive reasoning. Inductive decisions can be based on analogies, case studies, prior experience, statistical analyses, simulations, hypotheticals, trusted testimony, and the patterns individuals may recognize in a set of events, experiences, symptoms or behaviors. Although it does not yield certainty, inductive reasoning can provide a solid basis for confidence in an individual's conclusions and a reasonable basis for action.

The levels for the Overall attainment are: not manifested, weak, moderate, strong, superior. The levels for each of the scales are: not manifested, moderate, and strong.


## 8 <br> SLO4. Data supports that students use quantitative reasoning to solve mathematical problems.

Quantitative Reasoning: Math. The Math department focused on course-specific topics within each core course and worked to address observed deficiencies in student performance). While a threshold of success set by the Mathematics Department was met, the math department did also identify a set of skills for additional continuous improvement instruction as: standard deviation calculation (Statistics), finding the linear system giving the augmented matrix (Matrix Theory), determining the zeros and their multiplicity for polynomial functions (Polynomial Functions), finding the vertical asymptotes of rational functions (Rational Functions).


Chart displays percent of students answering correctly a set of exam questions in each of four major math-knowledge areas.
Success threshold: 50 percent of students will correctly answer any given question.

SLO5. Results show that students demonstrate an understanding of aesthetic, historical, philosophical, and ethical issues of diverse communication.

Art Appreciation. AUM uses a pre-post testing design instrument to assess intercultural knowledge and competency (an understanding of the aesthetical, historical, philosophical, and ethical issues). The test is given to all sections of VISU 1000 (Art Appreciation, Introduction to Visual Arts).
2018. In Spring 2018 and Fall 2018, the post-test revealed that $47 \%$ of students scored acceptable or outstanding on the questions associated with Cognitive Skills (+11 percentage points improvement from pretest). The acceptable or outstanding post-test percentages were higher for Affective Skills and Behavioral Skills at 67\% (+27 from improvement pretest) and $72 \%$ (+37 improvement from pretest), respectively.

The pre- post-testing demonstrated a definitive improvement in the students' performance across all three skills. In all of 2018, a total of 536 students across 18 sections were administered the testing.
2019. In further confirming support of students' positive development of intercultural knowledge and competency, in Spring 2019 and Fall 2019, the post-test revealed that $63 \%$ of students scored acceptable or outstanding on the questions associated with Cognitive Skills (+17 percentage points improvement from pretest). The acceptable or outstanding post-test percentages were again higher for Affective Skills and Behavioral Skills at $80 \%$ (+20 improvement from pretest) and 79\% (+31 improvement from pretest), respectively.

2018 and 2019. As with the 2018 data, the 2019 pre- post-testing results demonstrated a definitive improvement in the students' performance across all three skills. In all of 2019, a total of 557 students across 14 sections were administered the testing.

It is noteworthy that while there were performance level distinctions between the 2018 and 2019 classes (i.e., the two annual data sets), all three skills sets showed substantive improvement for both years and the patterns of improvement among the skill sets were similar.

The Art Appreciation chart directly below graphically displays this narrative.


## PROGRAM-RELATED ASSESSMENT AND LICENSURE COLLEGE AND DEPARTMENT STUDENT ACHIEVEMENT

Across AUM, colleges and departments measure student achievement in various ways. This narrative highlights some of these measurements.

## Licensure Rates

Two schools and one program report licensing and pre-licensing examination data.

## College of Education

## Praxis II Pass Rates, by Department, Students Preparing for Internship

For teacher education candidates, a passing score on all Praxis II tests required for specific licensure areas must be submitted to the Certification Office prior to internship placement. Two program areas exempt from this COE policy requirement include: Instructional Leadership and School Counseling master level candidates. Candidates in exempt programs who do not pass Praxis II tests are issued an "IP" in a course during their final term until a passing score is earned. (School Counseling has two internships and must pass Praxis II before placement in Internship II.) Thus, because of the Praxis Policy in the College of Education revised on August 20, 2014, Praxis II Pass Rates, by Department are 100\%.

| Year | Counselor, <br> Leadership, and <br> Special Education | Curriculum, <br> Instruction, and <br> Technology | Kinesiology |
| :--- | :--- | :--- | :--- |
| $2015-2016$ | $100 \%$ | $100 \%$ | $100 \%$ |
| $2016-2017$ | $100 \%$ | $100 \%$ | $100 \%$ |
| $2017-2018$ | $100 \%$ | $100 \%$ | $100 \%$ |
| $2018-2019$ | $100 \%$ | $100 \%$ | $100 \%$ |

## College of Nursing and Health Sciences NCLEX-RN Pass Rates

Every year from 2015-2019, a high percentage of students in the College of Nursing and Health Sciences passed the National Council Licensure Examination for Registered Nurses (NCLEX-RN).

Passage of this test is necessary for licensure for registered nurses. While the AUM NCLEXRN pass rates (for students who take the exam in Alabama) are comparable to the state and national averages; it should be highlighted that most recently in 2019 the AUM pass rate exceeded that of both the Alabama ( +3.3 percentage points) and National ( +5.1 percentage
points) The results of the NCLEX-RN tests are reported to the Office of Institutional Effectiveness annually.

| Year | AUM Pass Rate | Alabama Pass Rate | National Pass <br> Rate |
| :--- | :--- | :--- | :--- |
| $2016-2017$ | $89.9 \%$ | $90.4 \%$ | $87.0 \%$ |
| 2018 | $80.2 \%$ | $89.4 \%$ | $88.3 \%$ |
| 2019 | $93.3 \%$ | $90.0 \%$ | $88.2 \%$ |
| Average | $87.8 \%$ | $89.9 \%$ | $87.8 \%$ |

Note: In 2016-2017, Alabama Board of Nursing released the numbers based on the fiscal year (10/2016 through 9/2017). In 2018, they moved to the calendar year.

Additionally, the AUM School of Nursing NCLEX-RN pass rate for first-time test takers for the past five years remains at or higher than the benchmark of $80 \%$. As some examples of the continual improvement process, faculty has instituted several measures to further improve NCLEX-RN tests scores.

An individualized student mentoring program is ongoing, the School of Nursing changed from using the standardized tests from Assessment Technology Incorporated (ATI) to Health Education Systems Incorporated (HESI), and course specific exams are given in most nursing courses as well as an NCLEX-RN © predictor test in the final semester of the program. The School of Nursing also provides all graduating seniors with an NCLEX-RN review course process.

## Medical Laboratory Science

Medical Laboratory Science Board of Certification Exam Pass Rates
Employers of Medical Laboratory Science students expect that they have passed the American Society for Clinical Pathology certification exam.

From 2015-2019, the data shows Medical Laboratory Science students have excelled in passing the test. Students who have taken the program online have performed exceptionally over these years.

To ensure that the percent of all students who take the exam is maximized, program administrators continue to refine curricular aspects to better prepare certification candidates. Some changes include the addition of a comprehensive review course and weekly exams and more test items involving higher levels of learning have been introduced.

In the three most recent administrations, AUM students have averaged over an extended timeframe, a Medical Laboratory Science Board pass rate 11.3 and 11.7 percentage points higher than University-based programs and nationally, respectively.

| Year | Pass <br> Rates <br> (AUM) | University <br> Based <br> Programs | National | AUM Compared to <br> University Based <br> Programs: <br> Percentage point <br> difference* |
| :--- | :--- | :--- | :--- | :--- |
| 2015 | $88 \%$ | $79.2 \%$ | $78.9 \%$ | +8.8 |
| 2016 | $85 \%$ | $80.7 \%$ | $79.8 \%$ | +4.3 |
| 2017 | $84 \%$ | $78 \%$ | $77.1 \%$ | +6.0 |
| 2018 | $88 \%$ | $76 \%$ | $76.3 \%$ | +12.0 |
| 2019 | $96 \%$ | $80 \%$ | $79.5 \%$ | +16.0 |

*A " + " sign indicates AUM achieved the higher pass rate.
It is also a particular point of achievement that the Medical Laboratory Science Program students graduate at a rate of $94 \%$ (2016-2019).

## Further Resources

The Office of Institutional Effectiveness collects and analyzes data to assist with monitoring and continuously improving student achievement that includes such measures as: persistence, subject test results, licensure test results, course completions (or DFW) rates, growth in completions, success of graduates, core curriculum testing.

Additionally, student achievement information is reported externally in the Consumer Information Page. A link to this page is provided to the Southern Association of Colleges and Schools Commission on Colleges.

Further detailed information, contacts, data tabulations/ analyses, and various reports for the AUM Office of Institutional Effectiveness can be found at:
http://www.aum.edu/institutional-effectiveness

