## December 2019

## Dual Enrollment in Maryland

Annual Report to the Governor and General Assembly

# Maryland Longitudinal Data System Center 

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## Executive Summary

The Maryland Longitudinal Data System Center (MLDSC) is required to report annually on the number of students who are dually enrolled and the courses in which students dually enroll. This report, required under the College and Career Readiness and College Completion Act of 2013 (see Education Article § 24703.1, Annotated Code of Maryland), is the sixth MLDS Center Report.

The data for this report comes from the Maryland Longitudinal Data System (MLDS). The MLDS is Maryland's central repository for student education and workforce data. Students were identified in the System as dually enrolled if they were enrolled in both a public high school and a college in Maryland, and had at least one overlapping day of enrollment in both institutions.

A total of 13,504 Maryland public high school students were dually enrolled in the 2017-2018 academic year. This is approximately a $13 \%$ increase from the prior year. Maryland community colleges were the most common location for students accessing dual enrollment opportunities. Dually enrolled students more closely reflected the demographics of the Maryland college-going population than the Maryland public high school population. The majority of dually enrolled Maryland public high school students were female, white, and not economically disadvantaged (as measured by non-eligibility for free/reduced price meals), although there were increases in participation amongst economically disadvantaged students, and African American, Hispanic/Latino, and Asian students.

Course information is reported from Maryland public high schools. The MLDS does not currently receive college course information. Students accessed courses in a variety of subject areas. The highest numbers of courses with dual enrollment were in the subjects of English language and literature, and mathematics.

Dual enrollment participation varied widely across the state. This is a reflection of the unique and varied opportunities for dual enrollment in each school system. The data presented in this report identifies trends in dual enrollment that policymakers and other stakeholders can evaluate to understand the impact of CCR-CCA on dual enrollment in Maryland. Supplemental information on dually enrolled Maryland public high school students including Statewide Dual Enrollment Trends and County Dual Enrollment Trends are available on the MLDS Center website ${ }^{1}$ as a series of dashboards. The MLDS Center Research Branch completed a report studying the causal impacts of dual enrollment on postsecondary and workforce outcomes. That report, Effects of Dual Enrollment on College and Workforce, is available on the MLDS Center website under Research Reports.

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Prior MLDS Center Dual Enrollment Reports ${ }^{2}$

| Dual Enrollment Report | Date Published | Academic Year <br> of Data | Data Source |
| :--- | :---: | :---: | :---: |
| Dual enrollment report [2013 report] | December 2013 | $2012-2013$ | MHEC |
| Dual enrollment report [2014 report] | December 2014 | $2013-2014$ | MHEC |
| Dual enrollment report [2015 report] | December 2015 | $2014-2015$ | MLDS |
| Dual enrollment report [2016 report] | December 2016 | $2014-2015$ | MLDS |
| Dual enrollment report [2017 report] | December 2017 | $2015-2016$ | MLDS |
| Dual enrollment report [2018 report] | December 2018 | $2016-2017$ | MLDS |

[^1]
## Introduction

Under the College and Career Readiness and College Completion Act (CCR-CCA), the Maryland Longitudinal Data System (MLDS) Center is required to submit to the Governor and the General Assembly an annual report on dual enrollment in Maryland (see Education Article §24-703.1, Annotated Code of Maryland). This report is the sixth MLDS Center report on Dual Enrollment and the fifth that utilizes data directly from the Maryland Longitudinal Data System.

The MLDS Center publishes these annual dual enrollment reports in consultation with the Center's partner agencies:

- Maryland State Department of Education (MSDE);
- Maryland Higher Education Commission (MHEC); and
- Department of Labor (DoL).

The Maryland Longitudinal Data System is the State's central repository for student education and workforce data provided by the Center's partner agencies. The MLDS Center develops and maintains the System in order to provide analyses and produce relevant information on student and workforce outcomes in Maryland.

Under Education Article § 24-703.1, Annotated Code of Maryland, the Center shall report to the Governor and, in accordance with § 2-1246 of the State Government Article, the General Assembly on or before December $15^{\text {th }}$ of each year, disaggregated by local school system, regarding:
(1) The number of students who are dually enrolled under Title 18, Subtitle 14A of this article; and
(2) The number and course name of the courses in which a student under item (1) of this section dually enrolls at the high school and at the public institution of higher education.

The current report includes dual enrollment data for the 2017-2018 academic year. Additional background information on national dual enrollment rates and trends, and college enrollment outcomes for dually enrolled student can be found in the 2016 Dual Enrollment Report, other previous reports and dashboards ${ }^{3}$. The MLDS Center is required to report aggregate de-identified data in all reporting. All percentages reported are rounded.

[^2]
## What is dual enrollment?

Dual enrollment refers to any broad array of programs and opportunities that allow high school students to enroll in and take college courses. This includes programs in which students are enrolled in a dual enrollment course through a partnership agreement with their local school system and thereby receive both high school and college credit. Dual enrollment also occurs when high school students independently enroll in courses at a college and only earn college credits. Dual enrollment courses can be completed in a variety of different ways, including:

- High school students traveling to college campuses or college faculty traveling to high schools;
- Specially credentialed high school teachers teaching college-level courses to students in local high schools; or
- High school students taking courses from college instructors via distance education.


## Definitions in State Law

The CCR-CCA (Md. Code, Ed. Art. §18-14A-01) defines dual enrollment broadly. "Dually enrolled student" means a student who is dually enrolled in:
(i) A secondary school in the State; and
(ii) An institution of higher education in the State.

## Defined for this Report

For the purposes of this report, dual enrollment was defined broadly to align with the definition in the CCR-CCA. To identify dually enrolled students, data from the MLDS were used to identify students who:

1. Had overlapping enrollment dates in a Maryland public high school and a Maryland institution of higher education (hereinafter "college"); and
2. Were enrolled in the college for at least one day.

Students who met these criteria were identified as dually enrolled in this report. The most recent and complete data available in the MLDS at the time this report was drafted were for the 2017-2018 academic year.

## Prior Reporting

The criteria for determining which students to count as dually enrolled were revised for the 2017 report. The updated criteria have been used again for the 2019 report. The following table provides an explanation of the prior and current criteria.

| Criteria | Pre 2017 | 2017 forward |
| :--- | :---: | :---: |
| At least 1 day of overlapping enrollment dates in a Maryland public high <br> school and a college | Yes | Yes |
| Length of time enrolled in college | 30 days | 1 day |
| Length of semester | 30 days or <br> more | No minimum |
| College enrollment in the summer between high school grades 9, 10 and <br> 11 | Excluded | Included |
| Summer college enrollment for students who graduated high school the <br> summer following their expected June graduation | Excluded | Excluded |
| College enrollment for students who graduated high school immediately <br> following the college enrollment | Included | Excluded |

The revised criteria result in a slight reduction of the number of dually enrolled students as compared to prior criteria. The revised criteria exclude students who were enrolled in college in May immediately prior to high school graduation in June. These students were determined to be enrolled in college rather than dually enrolled in high school and college due to the timing of the enrollment at end of their high school program.

## Time Periods Included in the Report

The 2019 report includes data on dual enrollment from the first year of reporting, 2010-2011, and the three years prior to the 2017-2018 cohort presented in this report. Data for all cohorts can be reviewed on the Center dashboards ${ }^{4}$ or in prior reports.

[^3]
## Dual Enrollment in Maryland

## Statewide Dual Enrollment Trends

Dual enrollment rates for Maryland continue to increase annually. Figure 1 and Table 1 provide information on overall numbers and percentages of dual enrollment from 2010-2011, the first year of reporting, compared to the last four years. A total of 13,504 Maryland public high school students were dually enrolled in 2017-2018, an increase of $66 \%$ from 2010-2011. This rate of participation means that over $5 \%$ of all high school students (grades 9 to 12) had a dual enrollment experience in 2017-2018, an increase of 3 percentage points from the 2010-2011 rate. The majority of students dually enrolled were in $12^{\text {th }}$ grade, with $13 \%$ of all $12^{\text {th }}$ grade students dually enrolled in 2017-2018. See Tables 6 and 7.

Figure 1: Dually Enrolled High School Students, State of Maryland, 2011-2018


Table 1: High School Enrollment and Dual Enrollment, State of Maryland, 2011-2018

| Academic <br> Year | High School <br> Student Enrollment | Percent of Dually <br> Enrolled High School <br> Students | Percent Change in <br> Enrollment from <br> Prool Students |  |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 270,758 | 4,582 | $1.69 \%$ | $n / a$ |
| $\mathbf{2 0 1 4 - 2 0 1 5}$ | 260,059 | 8,613 | $3.31 \%$ | n |
| $\mathbf{2 0 1 5 - 2 0 1 6}$ | 260,750 | 10,307 | $3.95 \%$ | $19.67 \%$ |
| $\mathbf{2 0 1 6 - 2 0 1 7}$ | 264,544 | 11,992 | $4.53 \%$ | $16.35 \%$ |
| $\mathbf{2 0 1 7 - 2 0 1 8}$ | 266,765 | 13,504 | $5.06 \%$ | $12.61 \%$ |

[^4]
## School System and Grade Level Overview

All school systems in Maryland participated in dual enrollment, although levels and rates of participation vary widely. Table 2 provides the total number of dually enrolled students by school system. Statewide, $5.06 \%$ of students were dually enrolled. At the school system level, 17 school systems surpassed the State rate. Garrett's dual enrollment rate was three times that of the statewide rate and reflects a 2.5 percentage point increase over last year. Frederick, Somerset and Washington had dual enrollment rates that doubled the statewide rate; however, only Somerset had a notable increase last year (3\%) compared to Frederick and Washington (.2\% and .3\% increases respectively) ${ }^{6}$. The three school systems with the largest number of students dually enrolled were Baltimore County, Frederick, and Prince George's, not surprising as Prince George's and Baltimore County, are among the largest school systems in Maryland. Conversely, the largest school system in Maryland, Montgomery, ranked fifth in the total number of students dually enrolled.

Table 2: High School Enrollment and Dual Enrollment by Local School System, 2017-2018

| Local School System ${ }^{7}$ | High School Student Enrollment | Dual Enrollment | Percentage Dual Enrollment |
| :---: | :---: | :---: | :---: |
| State of Maryland | 266,765 | 13,504 | 5.06\% |
| Allegany | 2,614 | 216 | 8.26\% |
| Anne Arundel | 23,762 | 1,138 | 4.79\% |
| Baltimore City | 21,663 | 561 | 2.59\% |
| Baltimore County | 32,657 | 1,729 | 5.29\% |
| Calvert | 5,281 | 408 | 7.73\% |
| Caroline | 1,679 | 114 | 6.79\% |
| Carroll | 8,462 | 530 | 6.26\% |
| Cecil | 4,752 | 190 | 4.00\% |
| Charles | 8,701 | 378 | 4.34\% |
| Dorchester | 1,339 | 79 | 5.90\% |
| Frederick | 13,070 | 1,384 | 10.59\% |
| Garrett | 1,160 | 193 | 16.64\% |
| Harford | 11,704 | 786 | 6.72\% |
| Howard | 17,560 | 860 | 4.90\% |
| Kent | 597 | 44 | 7.37\% |
| Montgomery | 49,952 | 1,046 | 2.09\% |
| Prince George's | 38,368 | 2,027 | 5.28\% |
| Queen Anne's | 2,377 | 180 | 7.57\% |
| St. Mary's | 5,259 | 406 | 7.72\% |
| Somerset | 764 | 70 | 9.16\% |
| Talbot | 1,454 | 112 | 7.70\% |
| Washington | 7,026 | 689 | 9.81\% |
| Wicomico | 4,487 | 209 | 4.66\% |
| Worcester | 2,077 | 155 | 7.46\% |

[^5]
## Selected Student Groups

The figures and tables below provide information on dual enrollment patterns by gender, socioeconomic status, and racial and ethnic groups. The demographic profile of dually enrolled students has not significantly changed from 2010-2011 to 2017-2018. Dually enrolled students continue to be predominantly female, white, and not economically disadvantaged (identified by non-eligibility for free and reduced-price meals (FARMS)).

## Dual Enrollment Patterns: Gender

Table 3 provides trend data on gender distribution for dual enrollment from 2010-2011 and the last four years. Females continued to be the largest share of dually enrolled students. The gap between male and female participation appears to be consistent over time, even as dual enrollment participation increases. In 2010-2011, approximately 1,100 more females than males were dually enrolled. In 20172018, this gap increased to approximately 2,500; a rate that corresponds to the overall increase in dual enrollment participation. Female students as a share of total dual enrollees are overrepresented by eleven percentage points as compared to overall high school enrollment patterns in the State of Maryland. The higher rate of dual enrollment for female students is much closer to the gender distribution of Maryland colleges ( $6 \%$ percentage point difference to Maryland colleges). Figure 2,
Figure 3, and Figure 4 provide enrollment rates by gender for dual enrollment, high school, and college for 2017-2018.

Table 3: Dual Enrollment by Gender, State of Maryland, Trends 2011-2018

| Academic Year | Dual Enrollment | Males |  | Females |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Percent | Number | Percent |
| 2010-2011 | 4,582 | 1,729 | 38\% | 2,853 | 62\% |
| 2014-2015 | 8,613 | 3,415 | 40\% | 5,198 | 60\% |
| 2015-2016 | 10,307 | 4,157 | 40\% | 6,150 | 60\% |
| 2016-2017 | 11,992 | 4,992 | 42\% | 7,000 | 58\% |
| 2017-2018 | 13,504 | 5,405 | 40\% | 8,099 | 60\% |

Figure 2: Dual Enrollment by Gender, State of Maryland, 2017-2018


[^6]Figure 3: High School Enrollment by Gender, State of Maryland, 2017-2018

Figure 4: Undergraduate College Enrollment by Gender, State of Maryland, Fall 2017


Males
Females

## Dual Enrollment Patterns: Free or Reduced Price Meal Status

Free or Reduced Price Meals (FARMS) indicates a student's eligibility to receive low-cost or no-cost meals each school day. Students may be eligible for free or reduced-price meals through participation in certain Federal Assistance Programs or based on their family's income falling below a specified poverty threshold. The education community and this report rely on FARMS eligibility to identify economically disadvantaged students.

Dual enrollment rates for FARMS students increased eight percentage points in 2017-2018 to 23\% from $15 \%$ in 2010-2011. This increase translates to almost an additional 2,300 FARMS students participating in dual enrollment. Table 4 provides dual enrollment data for FARMS and Non-FARMS for 2010-2011 and the last four years. This increase could either be because more FARMS students participated or because more students were FARMS eligible. More research is required to understand the increase in participation.

Table 4: Dual Enrollment by Eligibility for Free and Reduced Price Meal Status (FARMS), State of Maryland, 20112018

| Academic Year | Dual Enrollment | FARMS |  | Non-FARMS |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Percent | Number | Percent |
| 2010-2011 | 4,582 | 705 | 15\% | 3,877 | 85\% |
| 2014-2015 | 8,613 | 2,000 | 23\% | 6,613 | 77\% |
| 2015-2016 | 10,307 | 2,308 | 22\% | 7,999 | 78\% |
| 2016-2017 | 11,992 | 2,577 | 21\% | 9,415 | 79\% |
| 2017-2018 | 13,504 | 3,067 | 23\% | 10,437 | 77\% |

Although FARMS dual enrollment continues to increase, this population is still underrepresented amongst dual enrollees. FARMS students comprised $37 \%$ of all public high school students, yet only $23 \%$ of dual enrollment students. Figure 5 and Figure 6 provide information on overall high school enrollment levels of FARMS students as compared to FARMS dual enrollment levels for 2017-2018.

Figure 5: Dual Enrollment by FARMS Status, State of Maryland, 2017-2018


- FARMS $\quad$ Non-FARMS

Figure 6: High School Enrollment by FARMS Status, State of Maryland, 2017-2018


■ FARMS ■ Non-FARMS

## Dual Enrollment Patterns: Race and Ethnicity

Dual enrollment participation is increasing for African American, Hispanic/Latino, and Asian students.
Table 5 provides enrollment numbers and percentages for each racial and ethnic group. The number of African American, Hispanic/Latino, and Asian students dually enrolled more than quadrupled from 20102011 to 2017-2018. Collectively, dual enrollment from these three groups accounted for $42 \%$ of all dually enrolled students in 2017-2018 compared to 25\% in 2010-2011.

Table 5: Dual Enrollment by Race/Ethnicity, State of Maryland, Trend 2011-2018

|  | Dual Enrollment | Asian |  | Black / African American |  | Hispanic / Latino |  | All Others |  | White |  | Two or more races |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year |  | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% |
| 2010-2011 | 4,582 | 190 | 4\% | 789 | 17\% | 198 | 4\% | 29 | 1\% | 3,251 | 71\% | 125 | 3\% |
| 2014-2015 | 8,613 | 617 | 7\% | 1,988 | 23\% | 617 | 7\% | 110 | 1\% | 4,928 | 57\% | 353 | 4\% |
| 2015-2016 | 10,307 | 728 | 7\% | 2,414 | 23\% | 731 | 7\% | 315 | 3\% | 5,638 | 55\% | 481 | 5\% |
| 2016-2017 | 11,992 | 870 | 7\% | 3,137 | 26\% | 910 | 8\% | 73 | 1\% | 6,461 | 54\% | 541 | 5\% |
| 2017-2018 | 13,504 | 1,070 | 8\% | 3,500 | 26\% | 1,069 | 8\% | 62 | 0\% | 7,250 | 54\% | 553 | 4\% |

Despite substantial gains in dual enrollment participation rates for African American and Hispanic/Latino since 2010-2011, the gap in participation between these two groups and whites has not narrowed in the last four years. Both African American and Hispanic/Latino students are underrepresented when compared to the overall racial and ethnic composition of Maryland high schools in 2017-2018. By contrast, Asian student participation rates for dual enrollment was slightly higher than that of their high school enrollment. Figures 7, 8, and 9 provide information on racial and ethnic enrollment distributions for dual enrollment, public high schools, and colleges. African American students comprised $34 \%$ of all high school students, yet only $26 \%$ of all dually enrolled students. Similarly, Hispanic/Latino students comprised $16 \%$ of all high school students, but only $8 \%$ of all dually enrolled students. Conversely, white students are overrepresented in the dual enrollment population, comprising $54 \%$ of dually enrolled students yet only $38 \%$ of all public high school students in Maryland. Interestingly, this pattern does not extend to college racial and ethnic distributions. The racial and ethnic composition of Maryland's colleges more closely approximates that of dually enrolled students in 2017-2018.

Figure 7: Dual Enrollment by Race/Ethnicity, State of Maryland, 2017-2018


Figure 8: High School Enrollment by Race/Ethnicity, State of Maryland, 2017-2018


Figure 9: College Enrollment by Race/Ethnicity, State of Maryland, Fall 2017


## Grade Level Dual Enrollment Trends

There are two ways to explore dual enrollment by grade level:

1. Distribution of dually enrolled students across grade levels; and
2. Percentage of all students by grade level that were dually enrolled.

Table 6 presents data on how students that are dually enrolled are distributed across grade levels (option 1 above). The distribution of dual enrollment across grade levels varies greatly. The largest share of dually enrolled students were those in $12^{\text {th }}$ grade. Dual enrollment in lower grade levels has increased dramatically since 2010-2011. In 2010-2011, less than twenty-five $9^{\text {th }}$ graders were dually enrolled, compared to 603 in 2017-2018. This increase represents a 3 percentage point increase in dual enrollment in $9^{\text {th }}$ grade between 2010-2011 and 2017-2018. Dual enrollment in $10^{\text {th }}$ and $11^{\text {th }}$ grades had more sizeable increases from 2010-2011 to 2017-2018. From 2010-2011 to 2017-2018 the percentage of dually enrolled students in $10^{\text {th }}$ grade increased nine percentage points, while the percentage of $11^{\text {th }}$ grade students increased 18 percentage points. These increases translated to a more than a tenfold increase in total numbers of students dually enrolled in grades 9,10 , and 11 from 2010-2011 to 20172018. Despite these large increases from 2010-2011 to present, the rates of dual enrollment in the lower grade levels has remained constant for the last four years even though there has been an increase in overall dual enrollment rates.

Table 6: Dual Enrollment Total Counts and Percentage by Grade Level, State of Maryland, Trend 2011-2018

| Academic Year | Dual Enrollment | Grade 9 |  | Grade 10 |  | Grade 11 |  | Grade 12 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| 2010-2011 | 4,582 | 23 | 1\% | 62 | 1\% | 240 | 5\% | 4,257 | 93\% |
| 2014-2015 | 8,613 | 284 | 3\% | 691 | 8\% | 1,944 | 23\% | 5,694 | 66\% |
| 2015-2016 | 10,307 | 298 | 3\% | 1,010 | 10\% | 2,191 | 21\% | 6,808 | 66\% |
| 2016-2017 | 11,992 | 444 | 4\% | 997 | 8\% | 2,666 | 22\% | 7,885 | 66\% |
| 2017-2018 | 13,504 | 603 | 4\% | 1,335 | 10\% | 3,066 | 23\% | 8,500 | 63\% |

Table 7 provides a different perspective on the distribution of dual enrollment by grade level. This table presents dual enrollment as a share of total students enrolled by grade level (option 2 above). Overall enrollment by grade levels has experienced little change between 2010-2011 and 2017-2018. Conversely, the percentage of students at each grade level dually enrolling has grown exponentially, even if the rates for Grades 9,10 , and 11 remain low. The proportion of $12^{\text {th }}$ graders dually enrolled has doubled since 2010-2011; however, the proportion of dually enrolled students at the lower grade levels has increased tenfold ( $11^{\text {th }}$ grade) and twentyfold ( $9^{\text {th }}$ and $10^{\text {th }}$ grades).

More research is needed to understand how participating in dual enrollment in lower grade levels impacts high school and college performance. It is possible that students dually enrolled in $9^{\text {th }}$ and $10^{\text {th }}$ grades are not ready for the academic rigor of college classes or the social atmosphere of college. They may feel overwhelmed by the college environment or the pace at which they need to perform academically. Conversely, this early introduction to college may provide extra motivation to excel in high school and enroll in college after graduation. The impact may also vary by type of dual enrollment course. Not all courses included in dual enrollment require intense levels of academic rigor, many courses may focus on other types of academic enrichment not otherwise available at the high school. Further, not all dual enrollment courses are taught at a college with a classroom of unfamiliar college students, many are offered th the high school with high school classmates.

Table 7: Dual Enrollment as a Percentage of Grade Level Enrollment, State of Maryland, Comparison 2010-2011 and 2017-2018

|  | 2010-2011 |  |  |  |  | 2017-2018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High <br> School <br> Enrollment | Dual <br> Enrollment | Percentage of <br> Grade Level Dually <br> Enrolled | High School <br> Enrollment | Percentage of <br> Enrollment | Grade Level <br> Dually Enrolled |
| Grade 9 | 74,903 | 23 | $<1 \%$ | 74,114 | 603 | $1 \%$ |
| Grade 10 | 69,247 | 62 | $<1 \%$ | 69,099 | 1,335 | $2 \%$ |
| Grade 11 | 62,750 | 240 | $<1 \%$ | 60,390 | 3,066 | $5 \%$ |
| Grade 12 | 63,858 | 4,257 | $7 \%$ | 63,162 | 8,500 | $13 \%$ |

Dual enrollment by grade levels can also be explored by demographic groups. Tables 8, 9, and $\mathbf{1 0}$ provide data on dual enrollment for each grade level by gender, FARMS, and race/ethnicity. The dual enrollment patterns across each group-grade level are generally consistent with overall dual enrollment grade level patterns. For example, $4 \%$ of dually enrolled students were in the $9^{\text {th }}$ grade. Likewise, of male students dually enrolled, $4 \%$ were in $9^{\text {th }}$ grade. See Table 8.

Table 8: Dual Enrollment by Grade Level and Gender, State of Maryland, 2017-2018

| Gender | Dual Enrollment | Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| ---: | :---: | :---: | :---: | :---: | :---: |
| State of Maryland | 13,504 | $4 \%$ | $10 \%$ | $23 \%$ | $63 \%$ |
| Male | 5,405 | $4 \%$ | $10 \%$ | $22 \%$ | $64 \%$ |
| Female | 8,099 | $5 \%$ | $10 \%$ | $23 \%$ | $62 \%$ |

The grade level dual enrollment patterns were also consistent for grade level dual enrollment rates for FARMS and non-FARMS. Overall, $63 \%$ of dually enrolled students were in the $12^{\text {th }}$ grade. Similarly, of FARMS students dually enrolled, $64 \%$ were in $12^{\text {th }}$ grade FARMS ( $64 \%$ ). See Table 9.

Table 9: Dual Enrollment by Grade Level and Eligibility for Free and Reduced Price Meal Status (FARMS), State of Maryland, 2017-2018

| FARMS Status | Dual Enrollment | Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| ---: | :---: | :---: | :---: | :---: | :---: |
| State of Maryland | 13,504 | $4 \%$ | $10 \%$ | $23 \%$ | $63 \%$ |
| FARMS | 3,067 | $4 \%$ | $10 \%$ | $22 \%$ | $64 \%$ |
| Non-FARMS | 10,437 | $5 \%$ | $10 \%$ | $23 \%$ | $62 \%$ |

There was less consistency in the grade level dual enrollment distribution patterns across racial and ethnic groups. See Table 10. Overall, dual enrollment in $9^{\text {th }}, 10^{\text {th }}, 11^{\text {th }}$, and $12^{\text {th }}$ grades is $4 \%, 10 \%, 23 \%$, and $63 \%$ respectively. Asian and African American students have higher than average rates of dual enrollment in $9^{\text {th }}$ and $10^{\text {th }}$ grades by five to six percentage points, and lower than average dual enrollment in $12^{\text {th }}$ grade by 12 to 17 percentage points. Conversely, whites have lower than average rates of dual enrollment in $9^{\text {th }}, 10^{\text {th }}$, and $11^{\text {th }}$ grades, but higher in $12^{\text {th }}$ grade. Asian and African American student groups appear to be engaging in dual enrollment earlier than white students, who appear to delay participation until $12^{\text {th }}$ grade.

Table 10: Dual Enrollment by Grade Level and Race/Ethnicity, State of Maryland, 2017-2018

| Race/Ethnicity | Dual Enrollment | Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| ---: | :---: | :---: | :---: | :---: | :---: |
| State of Maryland | 13,504 | $4 \%$ | $10 \%$ | $23 \%$ | $63 \%$ |
| Asian | 1,070 | $10 \%$ | $15 \%$ | $24 \%$ | $51 \%$ |
| Black/African American | 3,500 | $10 \%$ | $15 \%$ | $29 \%$ | $46 \%$ |
| Hispanic/Latino | 1,069 | $4 \%$ | $12 \%$ | $23 \%$ | $61 \%$ |
| All Others | 62 | $*$ | $*$ | $*$ | $56 \%$ |
| White | 7,250 | $1 \%$ | $6 \%$ | $19 \%$ | $73 \%$ |
| Two or more races | 553 | $*$ | $*$ | $*$ | $66 \%$ |

*Value suppressed due to small cell size.

Finally, Table 11 provides the total number of dually enrolled students by grade level for each local school system. Local school system grade level dual enrollment patterns were similar to those of the overall state patterns with a few notable exceptions. In Prince George's school system, 29\% of their dually enrolled students were in $12^{\text {th }}$ grade, less than half of the statewide rate of $63 \%$. Conversely, Prince George's dual enrollment in $9^{\text {th }}, 10^{\text {th }}$, and $11^{\text {th }}$ grades were nearly double the statewide rates for these grades ranging from eight to 15 percentage points higher than the statewide averages for each grades. Student's in Prince George's appear to be engaging in dual enrollment much earlier than students in other systems. Dual enrollment in Baltimore City was also notably different than statewide averages in three grade levels, $9^{\text {th }}, 10^{\text {th }}$, and $12^{\text {th }}$. In $9^{\text {th }}$ and $10^{\text {th }}$ grades, Baltimore City dual enrollment was double that of the statewide average. In $12^{\text {th }}$ grade, dual enrollment for Baltimore City was 13 percentage points lower than the statewide average. Baltimore City, is one of five local schools systems with $10^{\text {th }}$ grade dual enrollment that is at a rate that is double that of the statewide average and one of three local school systems with $9^{\text {th }}$ grade dual enrollment double that of the statewide average.

Other school systems also had distributions that varied from the statewide averages. Allegany, Anne Arundel, Cecil, Frederick, Harford, Queen Anne's, Washington, and Wicomico had $12^{\text {th }}$ grade dual enrollment percentages between 11 and 31 percentage points higher than the statewide average. Similarly, Charles, Dorchester, Prince George's, St. Mary's, and Worcester had $11^{\text {th }}$ grade dual enrollment percentages between eight and 16 percentage points higher than that statewide average. Finally, eight school systems did not have a single $9^{\text {th }}$ grade student dually enrolled (Allegany, Dorchester, Garrett, Kent, St. Mary's, Somerset, Talbot, and Worcester), while five did not have a single $10^{\text {th }}$ grade student dually enrolled (Allegany, Dorchester, Kent, Somerset, and Worcester). These variations in grade level enrollment patterns most likely reflect differences in dual enrollment policies in each school system.

Table 11: High School Enrollment and Dual Enrollment by Local School System and Grade Level, 2017-2018

| School System ${ }^{8}$ | High School Student Enrollment | Dual Enrollment | Grade 9 | Grade <br> 10 | Grade <br> 11 | Grade $12$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State of Maryland | 266,765 | 13,504 | 4\% | 10\% | 23\% | 63\% |
| Allegany | 2,614 | 216 | ** | ** | <10\% | $\geq 90 \%$ |
| Anne Arundel | 23,762 | 1138 | 3\% | 5\% | 14\% | 79\% |
| Baltimore City | 21,663 | 561 | 9\% | 20\% | 24\% | 47\% |
| Baltimore | 32,657 | 1,729 | 8\% | 8\% | 27\% | 57\% |
| Calvert | 5,281 | 408 | * | 19\% | * | 65\% |
| Caroline | 1,679 | 114 | * | * | * | 68\% |
| Carroll | 8,462 | 530 | * | * | 21\% | 74\% |
| Cecil | 4,752 | 190 | * | * | * | 92\% |
| Charles | 8,701 | 378 | * | * | 36\% | 60\% |
| Dorchester | 1,339 | 79 | ** | ** | 39\% | 61\% |
| Frederick | 13,070 | 1,384 | 1\% | 2\% | 12\% | 86\% |
| Garrett | 1,160 | 193 | ** | 22\% | 27\% | 51\% |
| Harford | 11,704 | 786 | * | * | 5\% | 94\% |
| Howard | 17,560 | 860 | 7\% | 22\% | 25\% | 47\% |
| Kent | 597 | 44 | ** | ** | * | * |
| Montgomery | 49,952 | 1,046 | 6\% | 13\% | 21\% | 60\% |
| Prince George's | 38,368 | 2,027 | 12\% | 22\% | 38\% | 29\% |
| Queen Anne's | 2,377 | 180 | * | * | * | 76\% |
| St. Mary's | 5,259 | 406 | ** | 7\% | 31\% | 62\% |
| Somerset | 764 | 70 | ** | ** | 33\% | 67\% |
| Talbot | 1,454 | 112 | ** | * | * | 61\% |
| Washington | 7,026 | 689 | * | * | 22\% | 74\% |
| Wicomico | 4,487 | 209 | * | * | * | 81\% |
| Worcester | 2,077 | 155 | ** | ** | 32\% | 68\% |

*Value suppressed due to small cell size.
**No students were dually enrolled at this grade level.

[^7]
## Postsecondary Segments and Institutions

The vast majority of dual enrollment is completed at Maryland's community colleges, which enrolled $94 \%$ of all dually enrolled students. Figure 10 provides data on dual enrollment by college segment. Comparatively, as seen in Figure 11, only 39\% of all degree-seeking students in Maryland are enrolled in a Maryland community college.

Figure 10: Dual Enrollment Percentage by College Segment, State of Maryland, Fall 2017


Figure 11: Degree-Seeking Undergraduate College Enrollment Percentage by College Segment, State of Maryland, Fall 2017


Dual enrollment not only increases the overall student population at a college, but it also changes the composition of the student body. Dual enrollment students are younger than traditional college students and may require different support services, instructional methods, and faculty engagement than traditional college students. Table 12 shows that dual enrollment in Maryland's community colleges increases enrollment in the degree seeking population by $12 \%$. Comparatively, dual enrollment students provided a $1 \%$ or less than $1 \%$ population increase at Maryland's four-year public and stateaided independent institutions segments respectively.

It should be noted that not all dual enrollment course taking happens on a college campus. Some colleges actually teach the dual enrollment course at the high school rather than at the college campus. Further, many students that take dual enrollment courses at a college may only be there for one course in one semester or registered for a course over the summer when fewer traditional college students are present on campus. More research is needed to understand course-taking patterns and their impact (or lack of impact) on college campuses.

Table 12: College Enrollment and Dual Enrollment by College Segment, State of Maryland, 2017-2018

| Postsecondary Segment | Degree-Seeking College <br> Enrollment, Fall 2017 | Total Dual <br> Enrollment | Segment <br> Population Increase |
| :---: | :---: | :---: | :---: |
| Maryland Community Colleges | 102,756 | 12,707 | $12 \%$ |
| Maryland Four-Year Public Institutions | 136,072 | 614 | $<1 \%$ |
| Maryland State-Aided Independent |  |  |  |
| Institutions |  |  |  |$\quad 24,554 ~ 184 \%$

These enrollment patterns and population impacts were not uniform across institutions within each segment as seen in Table 13. The Community College of Baltimore County (14\%), Frederick Community College (11\%), and Prince George's Community College (15\%) realized the largest percentages of dually enrolled students within Maryland's community college segment. Relatedly, Carroll Community College (20\%), Chesapeake College (29\%), Frederick Community College (28\%), Garrett College (43\%), and Hagerstown Community College (21\%) experienced the largest overall population increases. With the exception of Frederick Community College, these institutions receive smaller percentages of high school students dually enrolled within the Maryland community college segment.

University of Maryland, College Park (27\%) and the University of Baltimore (26\%) received the largest percentage of dually enrolled students within Maryland's four-year public segment. Coppin State University enrolled $18 \%$ of dually enrolled students within the four-year public segment, a notable increase from last year's $8 \%^{9}$. Johns Hopkins University enrolled $70 \%$ of all dually enrolled students who enrolled in Maryland's state-aided independent segment, a fifteen percentage point increase over last

[^8]year ${ }^{10}$. For University of Maryland, College Park, Coppin State University, and Johns Hopkins University, the inclusion of dually enrolled students increased their overall undergraduate enrollments by $1 \%$ to $2 \%$, while the addition of dual enrollment students to University of Baltimore increased their undergraduate population by $6 \%$.

Table 13: Undergraduate Enrollment, Percentage of Dual Enrollment by College, State of Maryland, 2017-2018 ${ }^{11}$

| Maryland Community Colleges | Fall 2017 <br> Undergraduate College Enrollment | Percentage of Segment's Dual Enrollment | College Population Increase |
| :---: | :---: | :---: | :---: |
| Allegany College of Maryland | 1,990 | 2\% | 10\% |
| Anne Arundel Community College | 11,539 | 9\% | 10\% |
| Baltimore City Community College | 3,744 | 2\% | 6\% |
| Carroll Community College | 2,565 | 4\% | 20\% |
| Cecil Community College | 2,112 | 2\% | 9\% |
| Chesapeake College | 1,743 | 4\% | 29\% |
| College of Southern Maryland | 6,696 | 9\% | 18\% |
| Community College of Baltimore County | 17,657 | 14\% | 10\% |
| Frederick Community College | 4,830 | 11\% | 28\% |
| Garrett College | 450 | 2\% | 43\% |
| Hagerstown Community College | 3,179 | 5\% | 21\% |
| Harford Community College | 5,018 | 6\% | 16\% |
| Howard Community College | 9,069 | 6\% | 9\% |
| Montgomery College | 18,911 | 7\% | 5\% |
| Prince George's Community College | 10,784 | 15\% | 18\% |
| Wor-Wic Community College | 2,653 | 3\% | 15\% |
| Maryland Four-Year Public Institutions | Fall 2017 <br> Undergraduate College Enrollment | Percentage of Segment's Dual Enrollment | College Population Increase |
| Bowie State University | 5,101 | 13\% | 2\% |
| Coppin State University | 2,452 | 18\% | 4\% |
| Frostburg State University | 4,485 | 5\% | 1\% |
| Morgan State University | 6,425 | * | <1\% |
| St. Mary's College of Maryland | 1,544 | * | <1\% |
| Salisbury University | 7,552 | 3\% | <1\% |
| Towson University | 19,365 | 2\% | <1\% |
| University of Baltimore | 2,856 | 26\% | 6\% |
| University of Maryland, Baltimore | 918 | ** | ** |
| University of Maryland, Baltimore County | 11,126 | 1\% | <1\% |
| University of Maryland, College Park | 29,244 | 27\% | 1\% |
| University of Maryland University College | 42,287 | 2\% | <1\% |
| University of Maryland Eastern Shore | 2,800 | * | <1\% |

*Value suppressed due to small cell size.
**No students were dually enrolled at this college.

[^9]| Maryland State-Aided Independent Institutions | Fall 2017 <br> Undergraduate College Enrollment | Percentage of Segment's Dual Enrollment | College Population Increase |
| :---: | :---: | :---: | :---: |
| Capitol Technology University | 421 | * | * |
| Goucher College | 1,526 | ** | ** |
| Hood College | 1,108 | * | <1\% |
| Johns Hopkins University | 5,663 | 70\% | 2\% |
| Loyola University Maryland | 3,903 | * | <1\% |
| Maryland Institute College of Art | 1,743 | * | <1\% |
| McDaniel College | 1,565 | 5\% | 1\% |
| Mount St. Mary's University | 1,785 | 13\% | 1\% |
| Notre Dame of Maryland | 808 | ** | ** |
| St. John's College | 458 | ** | ** |
| Stevenson University | 3,375 | ** | ** |
| Washington Adventist University | 750 | * | * |
| Washington College | 1,449 | * | <1\% |

*Value suppressed due to small cell size.
${ }^{* *}$ No students were dually enrolled at this college.

Lastly, Table 14 presents grade level-segment enrollment patterns. Dually enrolled students, who enrolled in Maryland's community college segment, were predominantly in the $12^{\text {th }}$ grade. Dually enrolled students who enroll in Maryland's four-year public segment were also predominantly in $12^{\text {th }}$ grade with $11^{\text {th }}$ grade enrollment a close second. Comparatively, the majority of dually enrolled students in Maryland's state-aided segment were in the $11^{\text {th }}$ grade, while the percentage who were in $12^{\text {th }}$ grade was less than one-third that of the four-year public segment. The state-aided segment also had twice as many $9^{\text {th }}$ grade dually enrolled students as the community college segment and more than double the $10^{\text {th }}$ grade dually enrolled students at the community college and four-year public segment. The pattern marks a change in distribution of $9^{\text {th }}$ and $10^{\text {th }}$ grade dually enrolled students from last year ${ }^{12}$. In 2016-2107, four-year public and state-aided independent institutions both had twice as many $9^{\text {th }}$ grade students as the community college segment. Further, in 2016-2017, there was only a five percentage point difference between the percentage of $10^{\text {th }}$ grade students at four-year publics and state-aided independent institutions compared to the fifteen percentage point difference this year.

Table 14: Dual Enrollment Percentage by Grade Level and College Segment, State of Maryland, 2017-2018

| Postsecondary Segment | Total Dual <br> Enrollment | Grade <br> 9 | Grade <br> Grade | Grade <br> 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Maryland Community Colleges | 12,707 | $4 \%$ | $10 \%$ | $22 \%$ | $64 \%$ |
| Maryland Four-Year Public Institutions | 613 | $6 \%$ | $12 \%$ | $33 \%$ | $49 \%$ |
| Maryland State-Aided Independent Institutions | 184 | $8 \%$ | $27 \%$ | $51 \%$ | $14 \%$ |

[^10]
## Dual Enrollment Course Information

There are two sources of course information for dually enrolled students: 1) the high school and 2) the college.

Course information is available from the Maryland State Department of Education (MSDE) for students who dually enrolled through a partnership agreement with the local school system, provided the local school system collected and reported the information.

Forty-eight percent of Maryland's dually enrolled students in academic year 2017-2018 had dual enrollment course information reported from (MSDE). This is an increase from last year where course information was only available for $41 \%$ of students. Table 15 presents the rate at which courses were identified as taken through partnership agreements for each school system. Course reporting may never equal $100 \%$ for two reasons. First, it is possible that courses were taken through partnership agreement but not coded as such in the data. Second, some dually enrolled students take courses in the summer, those courses are not considered dual enrollment by MSDE and thus would not be coded.

College course information from the Maryland Higher Education Commission (MHEC) is not yet available. MHEC began collecting course information from colleges in 2014 and it will be available to MLDS in 2019. Availability of MHEC course data will help identify under-reporting by coding errors versus course work completed in the summer.

Table 15: Dually Enrolled Students with Dual Enrollment High School Course Information by School System, 2017-2018

| School System | Percentage with Available <br> High School Course <br> Information |
| ---: | :---: |
| State of Maryland | $48 \%$ |
| Allegany | $95 \%$ |
| Anne Arundel | $0 \%$ |
| Baltimore City | $56 \%$ |
| Baltimore | $33 \%$ |
| Calvert | $23 \%$ |
| Caroline | $87 \%$ |
| Carroll | $77 \%$ |
| Cecil | $74 \%$ |
| Charles | $69 \%$ |
| Dorchester | $87 \%$ |
| Frederick | $91 \%$ |
| Garrett | $49 \%$ |
| Harford | $0 \%$ |
| Howard | $14 \%$ |
| Kent | $95 \%$ |
| Montgomery | $58 \%$ |
| Prince George's | $61 \%$ |
| Queen Anne's | $78 \%$ |
| St. Mary's | $79 \%$ |
| Somerset | $100 \%$ |
| Talbot | $97 \%$ |
| Washington | $9 \%$ |
| Worcester | $76 \%$ |
|  | $96 \%$ |
|  |  |
|  |  |
|  |  |

[^11]
## Course Subjects

Courses are classified using the School Courses for the Exchange of Data (SCED) classification system.
Figure 12 provides data on the total number of dually enrolled students by SCED across all school systems. There are 18 SCED subject areas. Reported here are the most common subject areas for dual enrollment courses. The remaining SCED subjects were grouped together as a "Miscellaneous/Other" subject area.

Figure 12: Course Information for Dually Enrolled Students by SCED Subject Area, 2017-2018


Available course data indicate that dual enrollment primarily focused on English, math, and social sciences, and history courses. Some students pursued coursework in the arts, foreign languages, career and technical training and physical, health and safety education. These findings are consistent with prior year analyses ${ }^{14}$ with one exception. In 2015-2016 there were 2,658 students enrolled in Life and Physical Sciences, making it the third largest subject. This year, similar to last year, there are only 570 dual enrollments in this subject, dropping it to seventh largest. Physical, Health and Safety Education had a similar drop. In 2015-2016 the number of students dually enrolled in in this subject was 1,352; this year the total is 667 , which is slightly higher than the 426 from last year. The continued changes in these two groups is most likely the result of incomplete course data from several counties, including low reporting rates for Calvert (23\%), Howard (14\%), Washington (9\%) and other counties rather than by an actual change in course-taking patterns.

[^12]
## College Enrollment Patterns

The last section of this report explores college enrollment patterns for 12th grade students dually enrolled at any point between $9^{\text {th }}$ and $12^{\text {th }}$ grade and students never dually enrolled in high school. The percentages for college enrollment in the fall following $12^{\text {th }}$ grade for the state and each school system are presented in Table 16.

Table 16: 12th Grade Students with Subsequent College Enrollment in Fall 2018 by Dual Enrollment Status, 20172018

| School System | Total 12th Grade, Enrolled in College, Fall 2018 | Dually Enrolled between 9th and 12th Grade, Enrolled in College, Fall 2018 | Never Dually Enrolled, Enrolled in College, Fall 2018 |
| :---: | :---: | :---: | :---: |
| State of Maryland | 42\% | 61\% | 38\% |
| Allegany | 40\% | 69\% | 27\% |
| Anne Arundel | 43\% | 62\% | 39\% |
| Baltimore City ${ }^{15}$ | 31\% | 59\% | 29\% |
| Baltimore | 42\% | 66\% | 38\% |
| Calvert | 44\% | 65\% | 37\% |
| Caroline | 34\% | 66\% | 25\% |
| Carroll | 45\% | 56\% | 43\% |
| Cecil | 36\% | 61\% | 31\% |
| Charles | 40\% | 60\% | 36\% |
| Dorchester | 36\% | 76\% | 25\% |
| Frederick | 45\% | 59\% | 37\% |
| Garrett | 38\% | 54\% | 26\% |
| Harford | 45\% | 49\% | 43\% |
| Howard | 55\% | 63\% | 53\% |
| Kent | 30\% | 57\% | 19\% |
| Montgomery | 45\% | 58\% | 44\% |
| Prince George's | 35\% | 64\% | 31\% |
| Queen Anne's | 43\% | 59\% | 37\% |
| St. Mary's | 36\% | 60\% | 28\% |
| Somerset | 40\% | 71\% | 27\% |
| Talbot | 38\% | 58\% | 32\% |
| Washington | 36\% | 58\% | 25\% |
| Wicomico | 41\% | 66\% | 36\% |
| Worcester | 42\% | 61\% | 35\% |

Statewide, $42 \%$ of all $12^{\text {th }}$ grade students enrolled in college immediately following high school. Overall college enrollment for students with a dual enrollment experience between $9^{\text {th }}$ and $12^{\text {th }}$ grades was nineteen percentage points higher than the overall $12^{\text {th }}$ grade average. College enrollment for students who never had a dual enrollment experience was four percentage points lower than the overall average. This means that there is a 23 percentage point difference in immediate college going between those with a dual enrollment experience and those without.

[^13]At the school system level, the percentage of $12^{\text {th }}$ graders immediately enrolling in college ranged from a low of $30 \%$ (Kent) to a high $55 \%$ (Howard). Ten school systems had $12^{\text {th }}$ grade immediate college-going rates at or above the statewide average. At the school system level, the percentage of $12^{\text {th }}$ grade students that had a dual enrollment experience between $9^{\text {th }}$ and $12^{\text {th }}$ that went to college immediately following high school ranged from a low of $49 \%$ (Harford) to a high of $76 \%$ (Dorchester). Twelve school systems had college enrollment rates for students with a dual enrollment experience at or above the statewide average.

In all school systems, the percentage of dual enrollment students that immediately enrolled in college is higher than that of students that were never dually enrolled. In some school systems, the difference between the two rates is quite large. For example, in Dorchester, $76 \%$ of students with a dual enrollment experience immediately enroll in college after high school compared to $25 \%$ of those without a dual enrollment experience. This pattern is also present in larger school systems, like Prince George's where there is a thirty-three percentage point difference in immediate college enrollment between students with a dual enrollment experience (65\%) and those without (31\%). In school systems where the difference is less pronounced, this is due to higher than average college-going rates for nondually enrolled students and slightly lower than average rates for dually enrolled students. For example, in Harford there is only a six percentage point difference in immediate college enrollment between dually-enrolled students (49\%) and non-dually enrolled students (43\%). This pattern also exists in Carroll, Howard, and Montgomery which have a difference in college enrollment between the two groups of ten to fourteen percentage points, much lower than the twenty-three percentage point statewide average.

College enrollment results should be interpreted with caution because a greater percentage of dually enrolled students were female, white, and not eligible for FARMs, all characteristics associated with a greater likelihood of enrolling in college. Additional research is required to understand the differences in college enrollment patterns between dually enrolled and non-dually enrolled students, particularly at the school system level.

## Summary

The Maryland College and Career Readiness and College Completion Act of 2013 (CCR-CCA) sought to expand dual enrollment across the state both by encouraging participation and offering funding to support participation. CCR-CCA established rules for the tuition and fees that could be charged to dually enrolled students and created the Early College Access Grant to offer financial support to dual enrollment students. These policies were deemed critical to increasing dual enrollment participation.

Overall, both the number and percentage of high school students that were dually enrolled increased again this year; however, the percentage change in the increase from the prior year declined slightly, from $19.78 \%$ to $14.89 \%$. Some school systems experience sizable gains in dual enrollment in 2017-2018. For example, Allegany increased the number of its students dually enrollment from 5\% in 2016-2017 to $8 \%$ this year, while Garret increased from $14 \%$ to $17 \%$. Increasing dual enrollment in these counties may increase college enrollment which, in turn, may increase the percentage of high school graduates from these counties with a college degree. Increased college degree attainment may benefit Allegany and Garrett counties where presently only $18.2 \%$ and $19.6 \%$ of residents age 25 and older hold a bachelor's degree or higher, half the rate of the state (39\%). ${ }^{16}$ Increased levels of education may also help decrease the number of residents living in poverty in these counties by expanding career opportunities. Currently, $11.8 \%$ (Garrett) and 17\% (Allegany) of residents in these counties live in poverty, compared to the state rate of $9.3 \%{ }^{16}$. Further, increased college degree attainment helps support the State of Maryland's 2025 goal of having at least 55\% of its adults between the ages of 25 and 64 hold at least an Associate’s degree (Education Article §10-205(A)).

Larger numbers of students from underserved groups, such as racial/ethnic minorities and economically disadvantaged students, participated in dual enrollment; however, the overall distributions within groups have changed little in the last four years. After the passage of CCR-CCA, overall participation in dual enrollment as well as the share of racial/ethnic minorities and economically disadvantaged students dually enrolled increased. For example, in 2010-2011, the distribution of non-FARMS to FARMS students dually enrolled was $83 \%$ to $17 \%$ respectively. In 2013-2014, the distribution shifted to $79 \%$ to $21 \%$. Similarly, in 2010-2011, $71 \%$ of dually enrolled students were white, while $17 \%$ were Black/African American. This distribution pattern also changed in 2013-2014 to 61\% and 20\% respectively. Despite these initial gains, the distribution patterns have been relatively unchanged for the last four years. This year, FARMS students comprised $37 \%$ of all high school students, but only $23 \%$ of all dually enrolled students, a two percentage point increase from 2013-14. Similarly, this year, Black/African American students comprised 34\% of all high school students but only $26 \%$ of all dually enrolled students, a five percentage point increase from 2013-14. Despite gains in participation for these groups, they continue to be underrepresented in dual enrollment. Increasing participation rates

[^14]amongst these groups of students may be critical to expanding access to college for groups that are otherwise also underrepresented in college.

Also noteworthy in this year's report was the increase in students participating in dual enrollment at Coppin University. Last year, 31\% of students that participated in dual enrollment through the four-year public segment attended the University of Maryland, College Park (UMCP), while 29\% attended University of Baltimore (UB). This year, the share of dually enrolled students at UMCP declined to 27\% and UB declined to $26 \%$ while Coppin increased from $8 \%$ to $18 \%$, making Coppin the third largest site for dual enrollment in the four-year public segment. This increase was by design as Coppin sought to increase dual enrollment through a strategic partnership with Douglass High School. Students from Douglass High School enroll in the Coppin Academy to earn credits that will apply to both high school and a degree at Coppin.

Despite positive trends, limited conclusions can be drawn about Maryland's dual enrollment programs from the data in this report, particularly when comparing data across school systems. Students access dual enrollment in different ways within each school system. These differences could be due to the terms of partnership agreements, geographic location, course delivery, or other factors. Course subject offerings and scheduling also create variation in dual enrollment programs across school systems and may impact participation. It is possible that the courses offered through dual enrollment do not align to college and career interests for some students, or they are offered at times that create scheduling conflicts, either at school or home. Further, not all students have easy access to colleges. Student's participation may be limited due to the distance to college, lack of transportation, or other similar barriers.

More research is needed to understand how variations in program structure and course offerings effect which students dually enroll and how dual enrollment programs relate to college enrollment, academic preparation, and college performance. The data presented in this report identifies trends in dual enrollment that policymakers and other stakeholders can evaluate to understand the impact of CCR-CCA on dual enrollment in Maryland.

## More information

The MLDS Center Research Branch has completed a study on the causal impacts of dual enrollment on postsecondary and workforce outcomes. These analyses match each dually enrolled student to a student who was not dually enrolled based on demographic characteristics, program participation, school system, academic achievement, and distance to a college. This approach provides confidence that the effect found is actually due to dual enrollment, rather than due to student characteristics or school/school system characteristics that may relate to better outcomes. Preliminary findings were presented at the MLDS Center research series in 2017. The final published report, Effects of Dual Enrollment on College and Workforce, is available on the MLDS Center website under Research Reports.

Additional information on Dual Enrollment Trends is available on the MLDS Center website as a series of dashboards. These dashboards provide supplemental information on dually enrolled Maryland public high school students. The dashboards are available here:

- Statewide Dual Enrollment Trends
- County Dual Enrollment Trends


## Appendix

Table A.1: SCED Course Numbers, Subject Area, and Names for all Dual Enrollment courses by Local School System, 2017-2018

| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Title |
| :---: | :---: | :---: | :---: | :---: |
| Allegany | 01103 | English Language and Literature | COMPOSITION | COLLEGE ENGLISH |
| Allegany | 01199 | English Language and Literature | SPEECH-OTHER | COLL SPEECH |
| Allegany | 02057 | Mathematics | ALGEBRA III | COLLEGE ALGEBRA |
| Allegany | 02209 | Mathematics | PROBABILITY AND STATISTICS—OTHER | COLL PROB STAT |
| Allegany | 03052 | Life and Physical Sciences | BIOLOGY-ADVANCED STUDIES | COLL BIOLOGY I |
| Allegany | 03052 | Life and Physical Sciences | BIOLOGY-ADVANCED STUDIES | COLL BIOLOGY II |
| Allegany | 04254 | Social Sciences and History | PSYCHOLOGY | COLL PSYCHOLOGY |
| Allegany | 10008 | Computer and Information Sciences | PARTICULAR TOPICS IN COMPUTER LITERACY | COLLEGE COMPUTER LITERACY |
| Allegany | 10152 | Computer and Information Sciences | COMPUTER PROGRAMMING | COLL COMPUTER LOGIC |
| Baltimore City | 01001 | English Language and Literature | ENGLISH/LANGUAGE ARTS I (9TH GRADE) | ENGLISH 101 @ BCCC |
| Baltimore City | 01053 | English Language and Literature | LITERATURE | ENG 200 @ BCCC |
| Baltimore City | 01103 | English Language and Literature | COMPOSITION | DE COLLEGE COMPOSITION I |
| Baltimore City | 01103 | English Language and Literature | COMPOSITION | DE COLLEGE COMPOSITION II |
| Baltimore City | 01105 | English Language and Literature | RESEARCH/TECHNICAL WRITING | ENGL 101 @ MORGAN STATE U. |
| Baltimore City | 01105 | English Language and Literature | RESEARCH/TECHNICAL WRITING | ENGLISH 101 @ COPPIN |
| Baltimore City | 01105 | English Language and Literature | RESEARCH/TECHNICAL WRITING | WRITING 101 @ UB |
| Baltimore City | 01151 | English Language and Literature | PUBLIC SPEAKING | SPEECH 101 @ BCCC |
| Baltimore City | 01151 | English Language and Literature | PUBLIC SPEAKING | SPEECH 105 @ COPPIN |
| Baltimore City | 01999 | English Language and Literature | ENGLISH LANGUAGE AND LITERATURE—OTHER | RENG 92 @ BCCC |
| Baltimore City | 02108 | Mathematics | MATH ANALYSIS/ANALYTIC GEOMETRY | MATH 113 @ MORGAN STATE U. |
| Baltimore City | 02110 | Mathematics | PRE-CALCULUS | DE PRECALCULUS |
| Baltimore City | 02201 | Mathematics | PROBABILITY AND STATISTICS | MATH 107 @ BCCC |
| Baltimore City | 02201 | Mathematics | PROBABILITY AND STATISTICS | MATH 115 @ UB |


| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Title |
| :---: | :---: | :---: | :---: | :---: |
| Baltimore City | 02203 | Mathematics | AP STATISTICS | DE INTRO TO STATISTICAL METHODS |
| Baltimore City | 03051 | Life and Physical Sciences | BIOLOGY | BIO 101 @ BCCC |
| Baltimore City | 03051 | Life and Physical Sciences | BIOLOGY | BIO 102 @ BCCC |
| Baltimore City | 03051 | Life and Physical Sciences | BIOLOGY | COLLEGE BIOLOGY |
| Baltimore City | 03151 | Life and Physical Sciences | PHYSICS | COLLEGE PHYSICS |
| Baltimore City | 04053 | Social Sciences and History | MODERN WORLD HISTORY | HISTORY 202 @ COPPIN |
| Baltimore City | 04062 | Social Sciences and History | WORLD PEOPLE STUDIES | HISTORY 206 @ COPPIN |
| Baltimore City | 04102 | Social Sciences and History | EARLY U.S. HISTORY | H 101 @ BCCC |
| Baltimore City | 04103 | Social Sciences and History | MODERN U.S. HISTORY | HISTORY 102 @ BCCC |
| Baltimore City | 04151 | Social Sciences and History | U.S. GOVERNMENT— COMPREHENSIVE | POSC 301 @ COPPIN STATE |
| Baltimore City | 04251 | Social Sciences and History | ANTHROPOLOGY | ANTH 207 @ COPPIN STATE |
| Baltimore City | 04254 | Social Sciences and History | PSYCHOLOGY | PSYCHOLOGY 101 @ BCCC |
| Baltimore City | 04257 | Social Sciences and History | IB PSYCHOLOGY | DE INTRODUCTION TO PSYC |
| Baltimore City | 04258 | Social Sciences and History | SOCIOLOGY | DE INTRO TO SOCIOLOGY |
| Baltimore City | 04258 | Social Sciences and History | SOCIOLOGY | SOCIOLOGY 101 @ BCCC |
| Baltimore City | 04306 | Social Sciences and History | PHILOSOPHY | PHI 101 @ BCCC |
| Baltimore City | 06102 | Foreign Language and Literature | SPANISH II | SPANISH 102 @ CCBC |
| Baltimore City | 10010 | Computer and Information Sciences | COMPUTER LITERACY | CLT 100 @ BCCC |
| Baltimore City | 10011 | Computer and Information Sciences | COMPUTER SCIENCE PRINCIPLES | CIS 109 @ BCCC |
| Baltimore City | 12999 | Business and Marketing | BUSINESS AND MARKETING—OTHER | DE INTRO TO BUSINESS INDUSTRY |
| Baltimore City | 22003 | Miscellaneous | STUDY SKILLS | PRE 100 @ BCCC |
| Baltimore County | 01003 | English Language and Literature | ENGLISH/LANGUAGE ARTS <br> III (11TH GRADE) | COLL: ENGLISH 11 |
| Baltimore County | 01004 | English Language and Literature | ENGLISH/LANGUAGE ARTS IV (12TH GRADE) | COLL: ENGLISH 12 |
| Baltimore County | 01151 | English Language and Literature | PUBLIC SPEAKING | COLL: SPEECH 1 |


| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Title |
| :---: | :---: | :---: | :---: | :---: |
| Baltimore County | 02106 | Mathematics | TRIGONOMETRY/ALGEBRA | COLL: TRIGONOMETRY W/ALGEBRA |
| Baltimore County | 02108 | Mathematics | MATH ANALYSIS/ANALYTIC GEOMETRY | COLL: ALGEBRA COLLEGE |
| Baltimore County | 02110 | Mathematics | PRE-CALCULUS | COLL: PRE-CALCULUS |
| Baltimore County | 02111 | Mathematics | LINEAR ALGEBRA | COLL: ALGEBRA LINEAR |
| Baltimore County | 02121 | Mathematics | CALCULUS | COLL: CALCULUS |
| Baltimore County | 02121 | Mathematics | CALCULUS | COLL: CALCULUS BC |
| Baltimore County | 02123 | Mathematics | DIFFERENTIAL CALCULUS | COLL: DIFFERENTIAL EQUATIONS |
| Baltimore County | 02202 | Mathematics | INFERENTIAL PROBABILITY AND STATISTICS | COLL: <br> STATISTICS\&PROBABILITY |
| Baltimore County | 03003 | Life and Physical Sciences | ENVIRONMENTAL SCIENCE | COLL: ENVIRONMENTAL SCIENCE |
| Baltimore County | 03008 | Life and Physical Sciences | EARTH AND SPACE SCIENCE | COLL: EARTH/SPACE SCIENCE |
| Baltimore County | 03051 | Life and Physical Sciences | BIOLOGY | COLL: BIOLOGY |
| Baltimore County | 03053 | Life and Physical Sciences | ANATOMY AND PHYSIOLOGY | COLL: <br> ANATOMY\&PHYSIOLOGY |
| Baltimore County | 03101 | Life and Physical Sciences | CHEMISTRY | COLL: CHEMISTRY |
| Baltimore County | 04103 | Social Sciences and History | MODERN U.S. HISTORY | COLL: US HISTORY |
| Baltimore County | 04201 | Social Sciences and History | ECONOMICS | COLL:ECONOMICS \& PUB ISSUES |
| Baltimore County | 04254 | Social Sciences and History | PSYCHOLOGY | COLL: PSYCHOLOGY |
| Baltimore County | 04306 | Social Sciences and History | PHILOSOPHY | COLL: PHILOSOPHY |
| Baltimore County | 05051 | Fine and Performing Arts | INTRODUCTION TO THEATER | COLL: THEATRE ARTS 1 |
| Baltimore County | 06101 | Foreign Language and Literature | SPANISH I | COLL: SPANISH 1 |
| Baltimore County | 06121 | Foreign Language and Literature | FRENCH I | COLL: FRENCH 1 |
| Baltimore County | 06401 | Foreign Language and Literature | CHINESE I | COLL: CHINESE 1 |
| Baltimore County | 08016 | Physical, Health, and Safety Education | LIFETIME FITNESS <br> EDUCATION | COLL: PE FITNESS FOUNDATIONS/M |
| Baltimore County | 08051 | Physical, Health, and Safety Education | HEALTH EDUCATION | COLL: HEALTH |


| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Title |
| :---: | :---: | :---: | :---: | :---: |
| Baltimore County | 10152 | Computer and Information Sciences | COMPUTER PROGRAMMING | COLL: COMP SCI PRINCIPLES |
| Baltimore County | 10154 | Computer and Information Sciences | C++ PROGRAMMING | COLL: C++ PROGRAM LANGUAGE |
| Baltimore County | 10156 | Computer and Information Sciences | COMPUTER PROGRAMMING-OTHER LANGUAGE | COLL: VISUAL BASIC |
| Baltimore County | 10171 | Computer and Information Sciences | CTE- FOUNDATIONS OF COMPUTER SCIENCE | COLL:FOUNDATIONS OF COMP SCI |
| Baltimore County | 12061 | Business and Marketing | CTE- PRINCIPLES OF BUSINESS, ADMINISTRATION, AND MANAGEMENT | COLL:PRIN OF BUSINESSADMIN\&MGT |
| Baltimore County | 12062 | Business and Marketing | CTE- PRINCIPLES OF ACCOUNTING AND FINANCE | COLL:PRINCIPLES OF ACCOUNTING |
| Calvert | 01103 | English Language and Literature | COMPOSITION | HONORS COMP AND RHETORIC |
| Calvert | 01199 | English Language and Literature | SPEECH-OTHER | BASIC PRIN. OF SPEECH COMM.DE |
| Calvert | 02057 | Mathematics | ALGEBRA III | ALGEBRA 3 |
| Calvert | 02121 | Mathematics | CALCULUS | CALCULUS DE |
| Calvert | 02999 | Mathematics | MATHEMATICS-OTHER | INTRODUCTION TO STATISTICS DE |
| Calvert | 03003 | Life and Physical Sciences | ENVIRONMENTAL SCIENCE | HONORS ENVIRON. SCIENCE |
| Calvert | 04103 | Social Sciences and History | MODERN U.S. HISTORY | HONORS US HISTORY |
| Calvert | 04254 | Social Sciences and History | PSYCHOLOGY | PSYCHOLOGY |
| Calvert | 04258 | Social Sciences and History | SOCIOLOGY | POPULAR CUTURES DE |
| Calvert | 04258 | Social Sciences and History | SOCIOLOGY | SOCIOLOGY |
| Calvert | 04306 | Social Sciences and History | PHILOSOPHY | INTRODUCTION TO PHILOSOPHY DE |
| Calvert | 05149 | Fine and Performing Arts | MUSIC-OTHER | MUSIC APPRECIATION DE |
| Calvert | 05189 | Fine and Performing Arts | ART-GENERAL | HISTORY OF WESTERN ART I DE |
| Calvert | 10003 | Computer and Information Sciences | COMPUTER AND INFORMATION TECHNOLOGY | THE INFO AGE:EMERGING TECH DE |
| Calvert | 11101 | Communications and Audio/Visual Technology | JOURNALISM | INTRO TO MASS COMMUNICATION DE |


| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Title |
| :---: | :---: | :---: | :---: | :---: |
| Calvert | 12055 | Business and Marketing | BUSINESS PRINCIPLES AND MANAGEMENT | APPLIED BUS. COMMUNICATIONS DE |
| Calvert | 12104 | Business and Marketing | ACCOUNTING | INTRO TO BUS. MARKET ECON DE |
| Calvert | 21099 | Engineering and Technology | TECHNOLOGY-OTHER | TECHNOLOGY AND SOCIETY DE |
| Caroline | 01053 | English Language and Literature | LITERATURE | DE INTRO TO LITERATURE 102 |
| Caroline | 01103 | English Language and Literature | COMPOSITION | DE ENGLISH COMP 101 |
| Caroline | 01155 | English Language and Literature | COMMUNICATIONS | DE FUND OF ORAL COMMUNICATION |
| Caroline | 01155 | English Language and Literature | COMMUNICATIONS | DE INTERPERSON COMMUNICATION |
| Caroline | 02069 | Mathematics | ALGEBRA-OTHER | DE COLLEGE ALGEBRA |
| Caroline | 02209 | Mathematics | PROBABILITY AND STATISTICS—OTHER | DE STATISTICS |
| Caroline | 03003 | Life and Physical Sciences | ENVIRONMENTAL SCIENCE | DE ENVIRONMENTAL SCIENCE |
| Caroline | 03051 | Life and Physical Sciences | BIOLOGY | DE FUND OF BIOLOGY |
| Caroline | 04099 | Social Sciences and History | WORLD HISTORY—OTHER | DE WORLD CIVILIZATION I |
| Caroline | 04099 | Social Sciences and History | WORLD HISTORY—OTHER | DE WORLD CIVILIZATION II |
| Caroline | 04102 | Social Sciences and History | EARLY U.S. HISTORY | DE US HISTORY I |
| Caroline | 04254 | Social Sciences and History | PSYCHOLOGY | DE GENERAL PSYCHOLOGY |
| Caroline | 04258 | Social Sciences and History | SOCIOLOGY | DE SOCIOLOGY |
| Caroline | 04299 | Social Sciences and History | SOCIAL SCIENCES—OTHER | DE SOCIAL PROBLEMS |
| Caroline | 04302 | Social Sciences and History | HUMANITIES | DE HUMANITIES INTEGRATED ARTS |
| Caroline | 05139 | Fine and Performing Arts | MUSIC-GENERAL | DE INTRO TO MUSIC |
| Caroline | 08052 | Physical, Health, and Safety Education | HEALTH AND FITNESS | DE WELLNESS FOR LIFE |
| Caroline | 11056 | Communications and Audio/Visual Technology | PARTICULAR TOPICS IN AUDIO/VIDEO <br> TECHNOLOGY AND FILM | DE THE ART OF FILM |
| Caroline | 12051 | Business and Marketing | INTRODUCTORY BUSINESS | DE INTRO TO BUSINESS |
| Caroline | 12161 | Business and Marketing | RETAIL MARKETING | DE RETAILING |
| Caroline | 12165 | Business and Marketing | PRINCIPLES OF ADVERTISING | DE ADVERTISING |


| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Title |
| :---: | :---: | :---: | :---: | :---: |
| Caroline | 12199 | Business and <br> Marketing | MARKETING-OTHER | DE MARKETING |
| Caroline | 19261 | Human Services | HUMAN GROWTH AND <br> DEVELOPMENT | DE HUMAN GROWTH \& DEV. |
| Caroline | 19301 | Human Services | COUNSELING AND MENTAL <br> HEALTH | DE INTRO TO COUNSELING |
| Carroll | 01999 | English Language <br> and Literature | ENGLISH LANGUAGE AND <br> LITERATURE-OTHER | DUAL ENROLLMENT - <br> ENGLISH |
| Carroll | 02999 | Mathematics | MATHEMATICS-OTHER | DUAL ENROLLMENT - <br> MATHEMATICS |
| Carroll | 03049 | Life and Physical <br> Sciences | EARTH SCIENCE-OTHER | DUAL ENROLLMENT - <br> EARTH/SPACE |
| Carroll | 03099 | Life and Physical <br> Sciences | BIOLOGY-OTHER | DUAL ENROLLMENT - |
| Carroll | 03101 | Life and Physical <br> Sciences | CHEMISTRY | DUAL ENROLLMENT - |
| CHEMISTRY |  |  |  |  |$|$


| School System | SCED Code | SCED Subject Area | SCED Course Titte | LSS Course Title |
| ---: | :---: | :---: | :---: | :---: |
| Carroll | 19099 | Human Services | CHILD AND ELDER CARE- <br> OTHER | DUAL ENROLLMENT - <br> CHILDCARE |
| Carroll | 19262 | Human Services | CONSUMER <br> ECONOMICS/PERSONAL <br> FINANCE | DUAL ENROLLMENT - FIN LIT |
| Carroll | 21999 | Engineering and <br> Technology | ENGINEERING AND <br> TECHNOLOGY-OTHER | DUAL ENROLLMENT - STEM |
| Cecil | 02201 | Mathematics | PROBABILITY AND <br> STATISTICS | DE STATISTICS |
| Cecil | 03056 | Life and Physical <br> Sciences | AP BIOLOGY | DE BIOLOGY \& BIOLOGY LAB |
| Cecil | 03106 | Life and Physical <br> Sciences | AP CHEMISTRY | DE CHEMISTRY। |
| Cecil | 04256 | Social Sciences and <br> History | AP PSYCHOLOGY | DE PSYCHOLOGY |
| Cecil | 04258 | Social Sciences and <br> History | SOCIOLOGY | DE SOCIOLOGY |
| Cecil | 14154 | Health Care <br> Sciences | MEDICAL TERMINOLOGY | DE MEDICAL TERMINOLOGY |
| Charles | 01103 | English Language <br> and Literature | COMPOSITION | COMP AND RHET-H |
| Charles | 02057 | Mathematics | ALGEBRA III | AD ALG/TRG-H |
| Charles | 02110 | Mathematics | PRE-CALCULUS | PRE-CALC-H |
| Dorchester | 01006 | English Language <br> and Literature | AP ENGLSH LITERATURE <br> AND COMPOSITION | DUAL ENROLLMENT - |
| ENGLISH 102 |  |  |  |  |


| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Title |
| :---: | :---: | :---: | :---: | :---: |
| Dorchester | 04058 | Social Sciences and <br> History | ANCIENT CIVILIZATIONS | DUAL ENROLLMENT - WORLD <br> CIVILIZATIONS |
| Dorchester | 04101 | Social Sciences and <br> History | U.S. HISTORY- <br> COMPREHENSIVE | DUAL ENROLLMENT - <br> HISTORY 101 |
| Dorchester | 04203 | Social Sciences and <br> History | AP MICROECONOMICS | DUAL ENROLLMENT - PRIN <br> OF MICROECONOMICS |
| Dorchester | 04254 | Social Sciences and <br> History | PSYCHOLOGY | DUAL ENROLLMENT - <br> PSYCHOLOGY |
| Dorchester | 04258 | Social Sciences and <br> History | SOCIOLOGY | DUAL ENROLLMENT - |
| Dorchester | 04258 | Social Sciences and <br> History | SOCIOLOGY 101 |  |


| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Titte |
| :---: | :---: | :---: | :---: | :---: |
| Frederick | 03152 | Life and Physical Sciences | PHYSICS-ADVANCED STUDIES | FCCPHYSICS201 |
| Frederick | 03152 | Life and Physical Sciences | PHYSICS-ADVANCED STUDIES | INTPHYSICS1203FCC |
| Frederick | 03152 | Life and Physical Sciences | PHYSICS-ADVANCED STUDIES | INTPHYSICSII204FCC |
| Frederick | 04149 | Social Sciences and History | U.S. HISTORY-OTHER | HISTORY202FCC |
| Frederick | 04201 | Social Sciences and History | ECONOMICS | FCCEC201PRINOFECON |
| Frederick | 04254 | Social Sciences and History | PSYCHOLOGY | PSYCHOLOGY101FCC |
| Frederick | 04258 | Social Sciences and History | SOCIOLOGY | SOCIOLOGY101FCC |
| Frederick | 05154 | Fine and Performing Arts | VISUAL ARTCOMPREHENSIVE | FCCAR100 |
| Frederick | 05154 | Fine and Performing Arts | VISUAL ARTCOMPREHENSIVE | FCCDRAWING106 |
| Frederick | 06305 | Foreign Language and Literature | LATIN V | LATIN202FCC |
| Frederick | 06802 | Foreign Language and Literature | AMERICAN SIGN LANGUAGE II | FCCASL103 |
| Frederick | 10152 | Computer and Information Sciences | COMPUTER PROGRAMMING | FCC CIS106 OBJ DESGN \& PRG |
| Frederick | 10999 | Computer and Information Sciences | INFORMATION technology-other | FCCBU109:SMBUSINESS |
| Frederick | 10999 | Computer and Information Sciences | INFORMATION TECHNOLOGY-OTHER | FCCBU140:AGRI-BUSINESS |
| Frederick | 10999 | Computer and Information Sciences | INFORMATION TECHNOLOGY-OTHER | FCCCIS101COMPSCIFL |
| Frederick | 10999 | Computer and Information Sciences | INFORMATION TECHNOLOGY-OTHER | FCCCIS101COMPSCIOC |
| Frederick | 10999 | Computer and Information Sciences | INFORMATION technology-other | FCCCIS111 |
| Frederick | 10999 | Computer and Information Sciences | INFORMATION TECHNOLOGY-OTHER | FCCCIS170 |
| Frederick | 10999 | Computer and Information Sciences | INFORMATION TECHNOLOGY-OTHER | FCCCIS190 |
| Frederick | 10999 | Computer and Information Sciences | INFORMATION TECHNOLOGY-OTHER | FCCCIS191 |


| School System | SCED Code | SCED Subject Area | SCED Course Titte | LSS Course Title |
| :---: | :---: | :---: | :---: | :---: |
| Frederick | 10999 | Computer and <br> Information <br> Sciences | INFORMATION <br> TECHNOLOGY-OTHER | FCCCIS192 |
| Frederick | 10999 | Computer and <br> Information <br> Sciences | INFORMATION <br> TECHNOLOGY-OTHER | FCCCIS193 |
| Frederick | 10999 | Computer and <br> Information <br> Sciences | INFORMATION <br> TECHNOLOGY-OTHER | FCCCIS212 |
| Frederick | 11153 | Communications <br> and Audio/Visual <br> Technology | DIGITAL MEDIA DESIGN <br> AND PRODUCTION | FCCCMM152 |
| Frederick | 12051 | Business and <br> Marketing | INTRODUCTORY BUSINESS | FCCBU103INTBUSINESS |
| Frederick | 12104 | Business and <br> Marketing | ACCOUNTING | FCCACCT101PRINCACCT |
| Frederick | 12104 | Business and <br> Marketing | ACCOUNTING | FCCACCT102PRINACCT2 |
| Frederick | 12303 | Business and <br> Marketing | CTE- BUSINESS <br> ECONOMICS | FCCEC2O1PRINOFECON |
| Garrett | 01053 | English Language <br> and Literature | LITERATURE | GARRETT COLLEGE ENG102- |
| INTRO TO LIT |  |  |  |  |$|$


| School System | SCED Code | SCED Subject Area | SCED Course Title | Lss Course Title |
| :---: | :---: | :---: | :---: | :---: |
| Howard | 02123 | Mathematics | DIFFERENTIAL CALCULUS | DIFF EQUATIONS-G/T |
| Howard | 02124 | Mathematics | AP CALCULUS AB | CALCULUS AB - AP |
| Howard | 02125 | Mathematics | AP CALCULUS BC | CALC C/MULTIVAR CALC-AP |
| Howard | 04103 | Social Sciences and History | MODERN U.S. HISTORY | US HISTORY-HON |
| Howard | 04258 | Social Sciences and History | SOCIOLOGY | SOCIOLOGY |
| Howard | 05154 | Fine and Performing Arts | VISUAL ART— COMPREHENSIVE | ART I: FOUND OF STUDIO |
| Howard | 06101 | Foreign Language and Literature | SPANISH I | SPANISH I |
| Howard | 06121 | Foreign Language and Literature | FRENCH I | FRENCH I |
| Howard | 06403 | Foreign Language and Literature | CHINESE III | CHINESE III |
| Howard | 06601 | Foreign Language and Literature | RUSSIAN I | RUSSIAN I |
| Howard | 06602 | Foreign Language and Literature | RUSSIAN II | RUSSIAN II |
| Howard | 06801 | Foreign Language and Literature | AMERICAN SIGN LANGUAGE I | AMERICAN SIGN LANGUAGE I |
| Howard | 06802 | Foreign Language and Literature | AMERICAN SIGN LANGUAGE II | AM SIGN LANG II |
| Howard | 12062 | Business and Marketing | CTE- PRINCIPLES OF ACCOUNTING AND FINANCE | PRINC OF BUSINESS |
| Kent | 01053 | English Language and Literature | LITERATURE | CC/INTRO TO LITERATURE* 102 |
| Kent | 01151 | English Language and Literature | PUBLIC SPEAKING | CC/FUND OF ORAL COMM* |
| Kent | 02201 | Mathematics | PROBABILITY AND STATISTICS | CC/INTRO TO STATISTICS* |
| Kent | 03051 | Life and Physical Sciences | BIOLOGY | CC/FUND OF BIOLOGY*101 |
| Kent | 04065 | Social Sciences and History | PARTICULAR TOPICS IN WORLD HISTORY | WC/INTRO TO ENVIRONMENTAL ARCHAEOLOGY* |
| Kent | 04102 | Social Sciences and History | EARLY U.S. HISTORY | CC/US HISTORY I* |
| Kent | 04103 | Social Sciences and History | MODERN U.S. HISTORY | CC/US HISTORY II* |
| Kent | 04153 | Social Sciences and History | POLITICAL SCIENCE | WC/POLITICAL SCIENCE*102 |
| Kent | 04254 | Social Sciences and History | PSYCHOLOGY | CC/GEN PSYCHOLOGY* |
| Kent | 04254 | Social Sciences and History | PSYCHOLOGY | WC/GENPSYCHOLOGY* |
| Kent | 04258 | Social Sciences and History | SOCIOLOGY | CC/SOCIOLOGY*161 |


| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Titte |
| :---: | :---: | :---: | :---: | :---: |
| Kent | 04258 | Social Sciences and History | SOCIOLOGY | WC/INTRO TO SOCIOLOGY* |
| Kent | 05113 | Fine and Performing Arts | MUSIC THEORY | WC/INTRO TO MUSIC* |
| Kent | 06121 | Foreign Language and Literature | FRENCH I | WC/ELEMENTARY FRENCH* |
| Kent | 06122 | Foreign Language and Literature | FRENCH II | WC/FRENCH II* |
| Kent | 08057 | Physical, Health, and Safety Education | HEALTH AND LIFE MANAGEMENT | CC STRESS AND STRESS <br> MANAGEMENT* |
| Kent | 08057 | Physical, Health, and Safety Education | HEALTH AND LIFE MANAGEMENT | CC/WELLNESS FOR LIFE* |
| Kent | 19262 | Human Services | CONSUMER ECONOMICS/PERSONAL FINANCE | CC PERSONAL FINANCE* |
| Kent | 22003 | Miscellaneous | STUDY SKILLS | CC/FRESHMAN SEMINAR* |
| Montgomery | 01199 | English Language and Literature | SPEECH-OTHER | CL ADV SPEECH |
| Montgomery | 01999 | English Language and Literature | ENGLISH LANGUAGE AND LITERATURE-OTHER | CL ADV ENGLISH |
| Montgomery | 02999 | Mathematics | MATHEMATICS-OTHER | CL ADV MATH |
| Montgomery | 03999 | Life and Physical Sciences | LIFE AND PHYSICAL SCIENCES-OTHER | CL ADV SCIENCE |
| Montgomery | 04201 | Social Sciences and History | ECONOMICS | CL ADV ECONOMICS |
| Montgomery | 04999 | Social Sciences and History | SOCIAL SCIENCES AND HISTORY-OTHER | CL ADV SOCIAL STUDIES |
| Montgomery | 05099 | Fine and Performing Arts | THEATER - OTHER | CL ADV THEATRE |
| Montgomery | 05199 | Fine and Performing Arts | VISUAL ARTS—OTHER | CL ADV VISUAL ART |
| Montgomery | 05201 | Fine and Performing Arts | INTERDISCIPLINARY ARTS | CL ADV INTEGRATED ARTS |
| Montgomery | 06819 | Foreign Language and Literature | AMERICAN SIGN LANGUAGE-OTHER | CL ADV WL AM SIGN LANGUAGE |
| Montgomery | 06999 | Foreign Language and Literature | FOREIGN LANGUAGE AND LITERATURE—OTHER | CL ADV WORLD LANGUAGE |
| Montgomery | 08099 | Physical, Health, and Safety Education | HEALTH EDUCATION- OTHER | CL ADV HEALTH |
| Montgomery | 10004 | Computer and Information Sciences | COMPUTER APPLICATIONS | CL ADV COMPUTER APPS |
| Montgomery | 10199 | Computer and Information Sciences | COMPUTER <br> PROGRAMMING-OTHER | CL ADV COMPUTER SCIENCE |


| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Title |
| :---: | :---: | :---: | :---: | :---: |
| Montgomery | 11199 | Communications <br> and Audio/Visual <br> Technology | PRINTING TECHNOLOGY- <br> OTHER | CL ADV GRAPHIC DESIGN |
| Montgomery | 11999 | Communications <br> and Audio/Visual <br> Technology | COMMUNICATION AND <br> AUDIO/VIDEO <br> TECHNOLOGY-OTHER <br> 1199 | CL ADV MEDIA |


| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Title |
| :--- | :---: | :---: | :---: | :---: |
| Prince George's | 03053 | Life and Physical <br> Sciences | ANATOMY AND <br> PHYSIOLOGY | ANATOMY/PHYSIOLOGYDE |
| Prince George's | 03060 | Life and Physical <br> Sciences | MICROBIOLOGY | MICROBIOLOGY DE |
| Prince George's | 03063 | Life and Physical <br> Sciences | PARTICULAR TOPICS IN | ENVIRON BIOLOGY DE |
| Prince George's | 03099 | Life and Physical <br> Sciences | BIOLOGY-OTHER | BIOLOGY LAB DE |
| Prince George's | 03151 | Life and Physical <br> Sciences | PHYSICS | PHYSICS DE |
| Prince George's | 04051 | Social Sciences and <br> History | WORLD HISTORY- | OVVERVIEW |


| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Title |
| :---: | :---: | :---: | :---: | :---: |
| Prince George's | 08051 | Physical, Health, <br> and Safety <br> Education | HEALTH EDUCATION | HEALTH ISSUES DE |
| Prince George's | 10001 | Computer and <br> Information <br> Sciences | INTRODUCTION TO <br> COMPUTER TECHNOLOGY | INTRO INFO TECH DE |
| Prince George's | 10012 | Computer and <br> Information <br> Sciences | EXPLORING COMPUTER <br> SCIENCE | FOUND COMP SCI DE |


| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Title |
| :---: | :---: | :---: | :---: | :---: |
| Queen Anne's | 02201 | Mathematics | PROBABILITY AND STATISTICS | INTRO TO STATISTICS |
| Queen Anne's | 03101 | Life and Physical Sciences | CHEMISTRY | GENERAL CHEMISTRY I |
| Queen Anne's | 04049 | Social Sciences and History | GEOGRAPHY-OTHER | CULTURAL GEOGRAPHY GEO142 |
| Queen Anne's | 04052 | Social Sciences and History | WORLD HISTORY AND GEOGRAPHY | WORLD CIVILIZATION I |
| Queen Anne's | 04061 | Social Sciences and History | WORLD AREA STUDIES | WORLD CIVILIZATION II |
| Queen Anne's | 04149 | Social Sciences and History | U.S. HISTORY-OTHER | US HISTORY I |
| Queen Anne's | 04149 | Social Sciences and History | U.S. HISTORY-OTHER | US HISTORY II |
| Queen Anne's | 04249 | Social Sciences and History | ECONOMICS-OTHER | PRIN MICROECONOMICS |
| Queen Anne's | 04254 | Social Sciences and History | PSYCHOLOGY | GENERAL PSYCHOLOGY |
| Queen Anne's | 04254 | Social Sciences and History | PSYCHOLOGY | PSYCHOLOGY 150 |
| Queen Anne's | 04258 | Social Sciences and History | SOCIOLOGY | SOCIOLOGY |
| Queen Anne's | 05189 | Fine and Performing Arts | ART-GENERAL | INTRO TO ART |
| Queen Anne's | 05194 | Fine and Performing Arts | IB FILM | THE ART OF FILM |
| Queen Anne's | 08049 | Physical, Health, and Safety Education | PHYSICAL EDUCATIONOTHER | STRESS \& STRESS MANAGEMENT |
| Queen Anne's | 08049 | Physical, Health, and Safety Education | PHYSICAL EDUCATION— OTHER | WELLNESS FOR LIFE |
| Queen Anne's | 10206 | Computer and Information Sciences | MOBILE APPLICATIONS | MICRO APPS INTEGRATION |
| Queen Anne's | 13207 | Manufacturing | WELDING | WEL 101 BASIC ARC WELDING |
| Queen Anne's | 13207 | Manufacturing | WELDING | WEL105 INTERMEDIATE WELDING |
| Queen Anne's | 15051 | Public, Protective, and Government Service | CRIMINAL JUSTICE | CMJ 211 TECH OF CRIMINAL INVES |
| Queen Anne's | 15051 | Public, Protective, and Government Service | CRIMINAL JUSTICE | CRIMINOLOGY CMJ191 |
| Queen Anne's | 15055 | Public, Protective, and Government Service | FORENSIC SCIENCE | FORENSIC PSYCH \& VICTIMOLOGY |
| Queen Anne's | 19261 | Human Services | HUMAN GROWTH AND DEVELOPMENT | HUMAN GROWTH \& DEVELOPMENT PSC |


| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Title |
| :---: | :---: | :---: | :---: | :---: |
| Queen Anne's | 22106 | Miscellaneous | SEMINAR | FRESHMAN SEMINAR |
| COURSE |  |  |  |  |


| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Title |
| :---: | :---: | :---: | :---: | :---: |
| St. Mary's | 01105 | English Language and Literature | RESEARCH/TECHNICAL WRITING | COLLEGE BUSINESS WRITING |
| St. Mary's | 02057 | Mathematics | ALGEBRA III | ALGEBRA 3 |
| St. Mary's | 02102 | Mathematics | DISCRETE MATHEMATICS | FINITE MATHEMATICS |
| St. Mary's | 02107 | Mathematics | TRIGONOMETRY/ANALYTIC GEOMETRY | COLLEGE ANALYTIC TRIGONOMETRY |
| St. Mary's | 02108 | Mathematics | MATH ANALYSIS/ANALYTIC GEOMETRY | CALC I AND ANALYTIC GEOMETRY |
| St. Mary's | 02110 | Mathematics | PRE-CALCULUS | PRECALCULUS (CM) |
| St. Mary's | 02110 | Mathematics | PRE-CALCULUS | PRECALCULUS (HONORS) |
| St. Mary's | 02121 | Mathematics | CALCULUS | CALCULUS (CM) |
| St. Mary's | 02121 | Mathematics | CALCULUS | CALCULUS II |
| St. Mary's | 02121 | Mathematics | CALCULUS | COL CALCULAS I |
| St. Mary's | 02123 | Mathematics | DIFFERENTIAL CALCULUS | CALCULUS III |
| St. Mary's | 02123 | Mathematics | DIFFERENTIAL CALCULUS | DIFFERENTIAL EQUATIONS |
| St. Mary's | 02201 | Mathematics | PROBABILITY AND STATISTICS | INTRODUCTION TO STATISTICS |
| St. Mary's | 04254 | Social Sciences and History | PSYCHOLOGY | GENERAL PSYCHOLOGY |
| St. Mary's | 14999 | Health Care Sciences | HEALTH CARE SCIENCES— OTHER | ACADEMY OF HEALTH PROFESSIONS 2 |
| Talbot | 01053 | English Language and Literature | LITERATURE | CC INTRO TO LITERATURE |
| Talbot | 01103 | English Language and Literature | COMPOSITION | CC COMPOSITION |
| Talbot | 01155 | English Language and Literature | COMMUNICATIONS | CC FUNDAMENTALS OF ORAL COMMUNICATION |
| Talbot | 02057 | Mathematics | ALGEBRA III | CC COLLEGE ALGEBRA |
| Talbot | 02201 | Mathematics | PROBABILITY AND STATISTICS | CC INTRO TO STATISTICS |
| Talbot | 03051 | Life and Physical Sciences | BIOLOGY | CC FUND OF BIOLOGY |
| Talbot | 03051 | Life and Physical Sciences | BIOLOGY | CC PRIN OF BIOLOGY I |
| Talbot | 03053 | Life and Physical Sciences | ANATOMY AND PHYSIOLOGY | CC ANATOMY \& PHYSIOLOGY । |
| Talbot | 04102 | Social Sciences and History | EARLY U.S. HISTORY | CC US HISTORY I |
| Talbot | 04254 | Social Sciences and History | PSYCHOLOGY | CC GENERAL PSYCHOLOGY |
| Talbot | 04255 | Social Sciences and History | PARTICULAR TOPICS IN PSYCHOLOGY | CC HUMAN GROWTH \& DEV |
| Talbot | 04258 | Social Sciences and History | SOCIOLOGY | CC INTRO TO HUMAN SRVCS SOC WORK |
| Talbot | 04258 | Social Sciences and History | SOCIOLOGY | CC SOCIOLOGY |
| Talbot | 05051 | Fine and Performing Arts | INTRODUCTION TO THEATER | CC INTRO TO THEATER |


| School System | SCED Code | SCED Subject Area | SCED Course Title | Lss Course Title |
| :---: | :---: | :---: | :---: | :---: |
| Talbot | 05203 | Fine and Performing Arts | FILM APPRECIATION AND ANALYSIS | CC THE ART OF FILM |
| Talbot | 08057 | Physical, Health, and Safety Education | HEALTH AND LIFE MANAGEMENT | CC WELLNESS FOR LIFE |
| Talbot | 13207 | Manufacturing | WELDING | CC BASIC ARC WELDING |
| Talbot | 14154 | Health Care Sciences | MEDICAL TERMINOLOGY | CC MEDICAL TERMINOLOGY |
| Washington | 01102 | English Language and Literature | ENGLISH/COMPOSITION (JUNIORS AND SENIORS) | COMP\&LIT |
| Washington | 01102 | English Language and Literature | ENGLISH/COMPOSITION (JUNIORS AND SENIORS) | ENG COMP |
| Washington | 01151 | English Language and Literature | PUBLIC SPEAKING | PUBLIC SPEAKING |
| Washington | 01155 | English Language and Literature | COMMUNICATIONS | INTRO TO HUM COMM |
| Washington | 02069 | Mathematics | ALGEBRA-OTHER | COLLEGE ALG |
| Washington | 02102 | Mathematics | DISCRETE MATHEMATICS | DISCRETE MATH |
| Washington | 02103 | Mathematics | TRIGONOMETRY | TRIGON |
| Washington | 02108 | Mathematics | MATH ANALYSIS/ANALYTIC GEOMETRY | FIN MATH |
| Washington | 02110 | Mathematics | PRE-CALCULUS | PRE-CALC |
| Washington | 02121 | Mathematics | CALCULUS | CALCULUS II |
| Washington | 02121 | Mathematics | CALCULUS | CALCULUS III |
| Washington | 02124 | Mathematics | AP CALCULUS AB | CALCULUS I |
| Washington | 02126 | Mathematics | PARTICULAR TOPICS IN CALCULUS | DIFFERENTIAL EQUATIONS |
| Washington | 02201 | Mathematics | PROBABILITY AND STATISTICS | INTRO TO STATS |
| Washington | 03051 | Life and Physical Sciences | BIOLOGY | HUMAN BIOLOGY |
| Washington | 03053 | Life and Physical Sciences | ANATOMY AND PHYSIOLOGY | HUM ANA AND PHY I |
| Washington | 03056 | Life and Physical Sciences | AP BIOLOGY | BIO LAB |
| Washington | 03056 | Life and Physical Sciences | AP BIOLOGY | DIV/LIV THINGS |
| Washington | 03056 | Life and Physical Sciences | AP BIOLOGY | PRIN BIO |
| Washington | 03056 | Life and Physical Sciences | AP BIOLOGY | PRIN BIO II |
| Washington | 03060 | Life and Physical Sciences | MICROBIOLOGY | MICROBIOLOGY |
| Washington | 03060 | Life and Physical Sciences | MICROBIOLOGY | MICROBIOLOGY LAB |
| Washington | 03101 | Life and Physical Sciences | CHEMISTRY | INTO COLLEGE CHEMISTRY |
| Washington | 03101 | Life and Physical Sciences | CHEMISTRY | INTRO COLLEGE CHEM LAB |


| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Title |
| :---: | :---: | :---: | :---: | :---: |
| Washington | 03101 | Life and Physical Sciences | CHEMISTRY | NUTRITION FOR HEALTH SCI |
| Washington | 03103 | Life and Physical Sciences | ORGANIC CHEMISTRY | ORGANIC CHEM II LAB |
| Washington | 03103 | Life and Physical Sciences | ORGANIC CHEMISTRY | ORGANIC CHEMISTRY I |
| Washington | 03103 | Life and Physical Sciences | ORGANIC CHEMISTRY | ORGANIC CHEMISTRY II |
| Washington | 3103 | Life and Physical Sciences | ORGANIC CHEMISTRY | ORGANIC CHEMSITRY I LAB |
| Washington | 3106 | Life and Physical Sciences | AP CHEMISTRY | CHEM LAB |
| Washington | 3106 | Life and Physical Sciences | AP CHEMISTRY | GEN CHEM |
| Washington | 3106 | Life and Physical Sciences | AP CHEMISTRY | GEN CHEM II |
| Washington | 3106 | Life and Physical Sciences | AP CHEMISTRY | GEN CHEM LAB II |
| Washington | 3151 | Life and Physical Sciences | PHYSICS | APPLIED PHYSICS |
| Washington | 3151 | Life and Physical Sciences | PHYSICS | GENERAL PHYSICS I |
| Washington | 3151 | Life and Physical Sciences | PHYSICS | GENERAL PHYSICS I LAB |
| Washington | 3151 | Life and Physical Sciences | PHYSICS | GENERAL PHYSICS II |
| Washington | 3151 | Life and Physical Sciences | PHYSICS | GENERAL PHYSICS II LAB |
| Washington | 3199 | Life and Physical Sciences | PHYSICS—OTHER | PRIN OF PHYSICS |
| Washington | 3199 | Life and Physical Sciences | PHYSICS—OTHER | PRIN OF PHYSICS II |
| Washington | 3199 | Life and Physical Sciences | PHYSICS—OTHER | PRIN OF PHYSICS III |
| Washington | 3199 | Life and Physical Sciences | PHYSICS—OTHER | PRIN OF PHYSICS LAB |
| Washington | 3199 | Life and Physical Sciences | PHYSICS—OTHER | PRIN OF PHYSICS LAB II |
| Washington | 3210 | Life and Physical Sciences | SCIENCE, TECHNOLOGY AND SOCIETY | STEM SEMINAR I |
| Washington | 3210 | Life and Physical Sciences | SCIENCE, TECHNOLOGY AND SOCIETY | STEM SEMINAR II |
| Washington | 4001 | Social Sciences and History | WORLD GEOGRAPHY | WORLD REGIONAL GEO |
| Washington | 4057 | Social Sciences and History | AP WORLD HISTORY | WORLD HIST |
| Washington | 4057 | Social Sciences and History | AP WORLD HISTORY | WORLD HIST II |
| Washington | 4104 | Social Sciences and History | AP U.S. HISTORY | US HISTORY I |

$\left.\begin{array}{|c|c|c|c|c|}\hline \text { School System } & \text { SCED Code } & \text { SCED Subject Area } & \text { SCED Course Titte } & \text { LSS Course Title } \\ \hline \text { Washington } & 4151 & \begin{array}{c}\text { Social Sciences and } \\ \text { History }\end{array} & \begin{array}{c}\text { U.S. GOVERNMENT- } \\ \text { COMPREHENSIVE }\end{array} & \text { AMERICAN GOVERNMENT } \\ \hline \text { Washington } & 4254 & \begin{array}{c}\text { Social Sciences and } \\ \text { History }\end{array} & \text { PSYCHOLOGY } & \text { DEVELOP PSYCH: HUMAN D } \\ \hline \text { Washington } & 4254 & \begin{array}{c}\text { Social Sciences and } \\ \text { History }\end{array} & \text { PSYCHOLOGY } & \text { GEN PSYCH } \\ \hline \text { Washington } & 4258 & \begin{array}{c}\text { Social Sciences and } \\ \text { History }\end{array} & \text { SOCIOLOGY } & \text { INTRO SOCIOLOGY } \\ \hline \text { Washington } & 4258 & \begin{array}{c}\text { Social Sciences and } \\ \text { History }\end{array} & \text { SOCIOLOGY } & \text { SOCIOLOGY OF SCI \&TECH } \\ \hline \text { Washington } & 4302 & \begin{array}{c}\text { Social Sciences and } \\ \text { History }\end{array} & \text { HUMANITIES } & \text { A CURIOUS CONTINUUM } \\ \hline \text { Washington } & 4306 & \begin{array}{c}\text { Social Sciences and } \\ \text { History }\end{array} & \text { PHILOSOPHY } & \text { INTRO TO PHILOSOPHY } \\ \hline \text { Washington } & 5004 & \begin{array}{c}\text { Fine and } \\ \text { Performing Arts }\end{array} & \text { DANCE HISTORY AND } \\ \text { APPRECIATION }\end{array}\right]$ DANCE APPRECI

| School System | SCED Code | SCED Subject Area | SCED Course Titte | LSS Course Titte |
| :---: | :---: | :---: | :---: | :---: |
| Washington | 10016 | Computer and <br> Information <br> Sciences | PLTW CYBERSECURITY | ETHICS INFORMATION AGE |
| Washington | 10053 | Computer and <br> Information <br> Sciences | DATABASE APPLICATIONS | DATABASE FUND |
| Washington | 10101 | Computer and <br> Information <br> Sciences | NETWORK TECHNOLOGY | NETWORK BASCIS |
| Washington | 10108 | Computer and <br> Information <br> Sciences | NETWORK SECURITY | ETHICAL HACKING FUND |
| Washington | 10108 | Computer and <br> Information <br> Sciences | NETWORK SECURITY | INTRO CYBERSEC |
| Washington | 10108 | Computer and <br> Information <br> Sciences | NETWORK SECURITY | TACTICAL PERIMETER |
| Washington | 10109 | Computer and <br> Information <br> Sciences | ESSENTIALS OF NETWORK | OPERATING SYSTEMS |


| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Title |
| :---: | :---: | :---: | :---: | :---: |
| Washington | 11004 | Communications <br> and Audio/Visual <br> Technology | SOCIAL MEDIA | MEDIA AND CULTURE |
| Washington | 11151 | Communications <br> and Audio/Visual <br> Technology | DIGITAL MEDIA | TECHNOLOGY |


| School System | SCED Code | SCED Subject Area | SCED Course Title | LSS Course Title |
| :---: | :---: | :---: | :---: | :---: |
| Wicomico | 1003 | English Language <br> and Literature | ENGLISH/LANGUAGE ARTS <br> III (11TH GRADE) | ENGLISH 11 - CL |
| Wicomico | 1004 | English Language <br> and Literature | ENGLISH/LANGUAGE ARTS <br> IV (12TH GRADE) | ENGLISH 12 CL |
| Wicomico | 1999 | English Language <br> and Literature | ENGLISH LANGUAGE AND <br> LITERATURE-OTHER | ENGLISH CL PREQ NC |
| Wicomico | 2121 | Mathematics | CALCULUS | CALCULUS - CL |
| Wicomico | 2126 | Mathematics | PARTICULAR TOPICS IN <br> CALCULUS | CALCULUS II - CL |


| School System | SCED Code | SCED Subject Area | SCED Course Titte | LSS Course Titte |
| :---: | :---: | :---: | :---: | :---: |
| Worcester | 3051 | Life and Physical <br> Sciences | BIOLOGY | WWCC FUNDAMENTALS OF <br> BIOLOGY DE |
| Worcester | 3101 | Life and Physical <br> Sciences | CHEMISTRY | GENERAL CHEMISTRY I (DE) |
| Worcester | 4058 | Social Sciences and <br> History | ANCIENT CIVILIZATIONS | WWCC WORLD <br> CIVILIZATIONS I DE |
| Worcester | 4058 | Social Sciences and <br> History | ANCIENT CIVILIZATIONS | WWCC WORLD <br> CIVILIZATIONS II DE |
| Worcester | 4102 | Social Sciences and <br> History | EARLY U.S. HISTORY | WWCC AMERICAN HISTORY <br> DE |
| Worcester | 4151 | Social Sciences and <br> History | U.S. GOVERNMENT- <br> COMPREHENSIVE | WWCC AMERICAN <br> GOVERNMENT DE |
| Worcester | 4254 | Social Sciences and <br> History | PSYCHOLOGY | WWCC INTRO TO <br> PSYCHOLOGY DE |
| Worcester | 4258 | Social Sciences and <br> History | SOCIOLOGY | WWCC INTRO TO SOCIOLOGY <br> DE |
| Worcester | 4306 | Social Sciences and <br> History | PHILOSOPHY | WWCC INTRO TO <br> PHILOSOPHY DE |
| Worcester | 5152 | Fine and <br> Performing Arts | ART HISTORY | WWCC INTRO TO ART <br> HISTORY DE |
| Worcester | 12051 | Business and <br> Marketing | INTRODUCTORY BUSINESS | WWCC INTRO TO BUSINESS <br> DE |
| Worcester | 19154 | Human Services | PARTICULAR TOPICS IN | WWCC FOUNDATIONS OF <br> EDUCATION |


[^0]:    ${ }^{1}$ See https://mldscenter.maryland.gov/Dashboards.html - for the dashboard series on Dual Enrollment Trends.

[^1]:    ${ }^{2}$ See https://mldscenter.maryland.gov/CenterReports.html - Select Center Reports under Center Output for a complete list of Dual Enrollment Reports.

[^2]:    ${ }^{3}$ See https://mldscenter.maryland.gov/CenterReports.html - Select Dual Enrollment Reports to review related reports and https://mldscenter.maryland.gov/Dashboards.html - Select Dual Enrollment Trends to review related dashboards.

[^3]:    ${ }^{4}$ See https://mldscenter.maryland.gov/Dashboards.html - Select Dual Enrollment Trends to review related dashboards.

[^4]:    ${ }^{5}$ High school enrollment report by the Maryland State Department of Education is based upon fall attendance as of September $30^{\text {th }}$. High school enrollment reported here reflects end-of-year attendance and includes both students enrolled before and after September 30th.

[^5]:    ${ }^{6}$ 2016-2017 Dual enrollment rates for all school systems can be found in MLDS Dual Enrollment Report of 2018.
    ${ }^{7}$ The SEED School of Maryland is reported in the Baltimore City total due to the small size of the population.

[^6]:    Males - Females

[^7]:    ${ }^{8}$ The SEED School of Maryland is reported in the Baltimore City total due to the small size of the population.

[^8]:    ${ }^{9}$ 2016-2017 Dual enrollment rates for all colleges and segments can be found in MLDS Dual Enrollment Report of 2018.

[^9]:    ${ }^{10}$ 2016-2017 Dual enrollment rates for all colleges and segments can be found in MLDS Dual Enrollment Report of 2018.
    ${ }^{11}$ The population increase is calculated against the fall semester college enrollment. Not all dually enrolled students enroll in the fall. Some of dual enrollment happens in spring and summer.

[^10]:    12 2016-2017 Dual enrollment rates for all colleges and segments can be found in MLDS Dual Enrollment Report of 2018.

[^11]:    ${ }^{13}$ The SEED School of Maryland is reported in the Baltimore City total due to the small size of the population.

[^12]:    ${ }^{14}$ The number of courses classified as miscellaneous/other was drastically reduced in 2015-2016 due to improvements in school system data quality and the expansion of the course classification to report Career and Technical Education courses. In 2013-2014, approximately 3,000 courses were identified as either miscellaneous or other compared to 596 for 2017-2018.

[^13]:    ${ }^{15}$ The SEED School of Maryland is reported in the Baltimore City total due to the small size of the population.

[^14]:    ${ }^{16}$ U.S. Census Bureau. QuickFacts. QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.

