Academic Quality and Workforce



# Study on Undergraduate Course Credit for Advanced Placement (AP) Examinations

Final Report to the Texas Legislature, per House Bill 1992, 84th Texas Legislature

October 2018

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#### **Agency Mission**

The mission of the Texas Higher Education Coordinating Board (THECB) is to provide leadership and coordination for Texas higher education and to promote access, affordability, quality, success, and cost efficiency through *60x30TX*, resulting in a globally competitive workforce that positions Texas as an international leader.

#### **Agency Vision**

The THECB will be recognized as an international leader in developing and implementing innovative higher education policy to accomplish our mission.

#### **Agency Philosophy**

The THECB will promote access to and success in quality higher education across the state with the conviction that access and success without quality is mediocrity and that quality without access and success is unacceptable.

#### THECB's core values are:

**Accountability:** We hold ourselves responsible for our actions and welcome every opportunity to educate stakeholders about our policies, decisions, and aspirations.

**Efficiency:** We accomplish our work using resources in the most effective manner. **Collaboration:** We develop partnerships that result in student success and a highly qualified,

globally competent workforce.

**Excellence:** We strive for excellence in all our endeavors.

The Texas Higher Education Coordinating Board does not discriminate on the basis of race, color, national origin, gender, religion, age or disability in employment or the provision of services.

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## **Executive Summary**

The debate continues about the ability of high schools to prepare students for college, and to provide them with the personal and academic skills needed to be successful in college (Venezia, Kirst, & Karp, 2003). There are several factors backed by research that contribute to college preparation and the timeliness of completing a college degree. One college preparation approach that has grown dramatically in the last few decades is the AP Exam, which allows high school students to pursue coursework while in high school that can result in college credit.

The second goal of the Texas Higher Education Strategic Plan, *60x30TX*, states that at least 550,000 students in 2030 will complete a certificate or associate's, bachelor's, or master's degree from an institution in Texas (THECB, 2015). To reach this goal, more students will need to be college ready before they graduate from high school. Research shows that when high school students are college ready they tend to have a successful transition to higher education institutions (Venezia & Jaeger, 2013).

House Bill (HB) 1992, passed by the 84th Texas Legislature, Regular Session, required the Texas Higher Education Coordinating Board (THECB) to submit an interim progress report to the governor and other legislatively mandated recipients in October 2016. The interim progress report included initial findings, an overview of the methodology used to conduct the study on the performance of undergraduate students, and a recommendation that Texas public institutions of higher education should document the AP exam subject title and score corresponding to each course for which credit is awarded. HB 1992 also directed the THECB to conduct a study and issue a report, due in January 2019, comparing the academic performance, retention rates, and graduation rates – disaggregated by AP exam score – of students who completed a lower-division course at an institution to students who received credit for that course based on a score of 3 or higher on an AP exam. This report fulfills that requirement.

Effective fall 2016, the majority of Texas public institutions of higher education allowed a score of 3 on an AP exam to be used for the awarding of course credit. All but two public institutions submitted statements of compliance, signed by the chief academic officer, certifying that their institutions were in compliance with HB 1992. In Academic Year (AY) 2013-14 among community and technical colleges (CTC), defined as public community colleges, state colleges, and state technical colleges, 31 of 54 institutions. In AY 2016-17, that number had increased to 45 colleges awarding credit for a 3 or higher on all accepted AP exams. In AY 2013-14 among Texas public universities, 5 of 35 four-year institutions accepted a score of 3 or higher on all AP Exams accepted by their institution. In AY 2016-17, the number of universities that awarded course credit for a score of 3 or higher had increased to 22 of 34.<sup>1</sup>

To conduct the study of student performance required by HB 1992, THECB staff requested data from the state's public institutions of higher education to determine the amount of course credit awarded for AP exam scores to first-time-in-college (FTIC) students who began college in AY 2013-14 and AY 2016-17. The THECB also requested data from the College Board on each AP exam taken by the students in the sample.

In AY 2016-17, FTIC students received a higher number of course credits based on achievement on AP exams than FTIC students in AY 2013-2014. This means that more students

<sup>&</sup>lt;sup>1</sup> In 2015, The University of Texas-Pan American and The University of Texas at Brownsville merged and established The University of Texas Rio Grande Valley, thus reducing the number of four-year institutions by one.

were taking the AP exams and choosing to claim college credit based on their AP exam score. The number of courses for which each student received credit also slightly increased, from a mean of 3.4 to a mean of 3.8.

Students are becoming more likely to claim the credit for which they are eligible (60%, up from 40%). Although the overall number of FTIC students decreased to 280,282, a total of 26,238 students received at least one course credit based on the score of an AP exam.

AP programming can provide high school students with the following benefits: access to more rigorous academic courses; savings in time and college costs; promotion of more efficiency in learning; and enhancement of college admission and success in college (Kleiner & Lewis, 2005). Based upon this report's analysis, THECB staff found that the academic outcomes were similar whether students took the lower-level college course, or had sought and been awarded college credit for that course based on their AP exam score. Overall, based on the FTIC 2013-14 cohort, students who claimed credit on the top four most-taken AP exams had a higher four-year graduation rate than the students who took the lower-level course. The exception to this was the Biology AP exam, for which students who took Biology for Science Majors I had a higher graduation rate than those that claimed credit for the same course. Accordingly, staff recommends the following:

**Recommendation 1.** Upon awarding course credit for an AP exam, Texas public institutions of higher education should document the AP exam subject title and score corresponding to each course for which credit is awarded so that institutions are able to conduct analysis on their AP polices and processes.

**Recommendation 2.** Upon awarding course credit for an AP exam, Texas public institutions of higher education should ensure the credit is applicable towards the degree, as appropriate, and used to satisfy degree requirements.

**Recommendation 3.** Higher education admission offices should help students claim the credit they have earned to save tuition and accelerate students' progress toward graduation. Although the percentage of eligible AP test-takers who received credit for their AP scores increased between 2013 and 2016, in 2016 40 percent of students who qualified to be granted course credit, based on their AP scores, did not receive it.

# Introduction

The second goal of the Texas Higher Education Strategic Plan, *60x30TX*, states that at least 550,000 students in 2030 will complete a certificate or associate, bachelor's, or master's degree from an institution in Texas (THECB, 2015). To reach this goal, more students will need to be college ready before they graduate from high school. Research shows that when high school students are college ready, they tend to have a successful transition to higher education institutions (Venezia & Jaeger, 2013).

For Texas students to become degree holders, educational pathways must be created that help ensure students are college ready, persist, save money, and complete their degrees. Texas supports proactive pathways that begin in high school and help reduce the cost and time to degree for students. Case in point, the AP program provides students the opportunity to take college-level coursework while they are still in high school and earn college credit and placement upon college entry based on AP examination results (College Board, 2016). The AP program is administered by the College Board, a not-for-profit organization commited to promoting excellence and and equity in higher education.

This study fulfills a legislative directive that the Texas Higher Education Coordinating Board (THECB) conduct a study of the academic performance of undergraduate students at institutions of higher education who received undergraduate course credit for qualifying scores on one or more AP examinations. The objective of this study is to compare academic performance, retention rates (persistence), and the graduation rates of students at Texas public institutions of higher education who completed lower-division courses to the outcomes for students who received credit for equivalent lower-division courses based on a score of 3 or higher on an AP examination, disaggregated by score, per Texas Education Code (TEC) 61.0518. A prior progress report was submitted to the governor and legislatively mandated recipients in October 2016.

#### House Bill 1992

The 84th Texas Legislature, Regular Session, passed House Bill (HB) 1992, "An Act relating to the granting of undergraduate course credit by advanced placement examination at public institutions of higher education." HB 1992 amended TEC Section 51.968, Undergraduate Course Credit for High School Students Completing Postsecondary-level Programs, and directed the THECB to conduct a study of the performance of students who receive undergraduate course credit for qualifying required scores of 3 or above on one or more Advanced Placement (AP) exams.

TEC Section 51.968 required each Texas public institution of higher education (IHE) that offers freshman-level courses to adopt and implement a policy to grant undergraduate course credit to entering freshman students who have qualifying scores on one or more examinations in the AP program. Each institution was instructed to establish conditions for granting course credit, including the minimum required scores on AP exams, and to identify the specific course credit or other academic requirements, including the number of semester credit hours (SCH) or other course credit, that the institution would grant to a student with qualifying AP exam scores. HB 1992 amended the existing statute by adding Section 51.968 (c-1), which instructs Texas public institutions of higher education, as they establish the minimum required score on an AP examination, not to require a score higher than 3 unless the institution's chief academic officer determines, based on evidence, that a higher score on the examination is necessary to indicate that a student is sufficiently prepared to be successful in a related, more advanced course for which the lower-division course is a prerequisite. This legislation applies to entering freshman at Texas public IHEs beginning with the 2016 fall semester.

HB 1992 also instructed the THECB – in consultation with institutions of higher education, the THECB's Undergraduate Education Advisory Committee (UEAC), and other interested parties – to conduct a study due January 1, 2019, on the performance of undergraduate students at Texas public IHEs that receive undergraduate course credit for achieving the required scores on one or more AP exams. This report satisfies that legislative directive.

#### The Advanced Placement (AP) Program

The College Board's Advanced Placement (AP) program is a cooperative educational endeavor among secondary schools, community colleges, and universities. Designed to accelerate learning, reward achievement, and enhance high school and college programs, the AP program offers students the opportunity to pursue coursework while still in high school. Once students complete an AP course they may seek course credit upon, or during college enrollment. Since its inception in 1955, the number of AP courses and exams has varied. In the Academic Year (AY) 2015-16, 37 AP courses and exams were offered in 25 subject areas, (College Board, 2016).

Committees of college and high school faculty work together to develop AP courses and exams and to develop performance measures and standards designed to ensure that course content corresponds to the content taught in college courses. Comparability studies are also conducted in which college faculty administer the AP exam in a specific subject to students in the related college course, and student outcomes are correlated to final course grades. The results of both the alignment work and the comparability studies are used to establish the scoring metrics for the AP subject exams.

AP courses are taught by high school faculty, and while there are no defined selection criteria for who can serve as an AP teacher, the College Board provides and recommends professional development opportunities for those teaching AP courses. The College Board also conducts an AP Course Audit, which specifies the expectations for courses authorized to use the "AP" designation. Not all students who enroll in AP courses take the AP exam at the end of the year, and not all students who take the exam have enrolled in an AP course prior to sitting for the exam. High schools may offer AP exams without participating in the AP Course Audit. AP exams are scored on a scale of 1 through 5. The scores are intended to reflect the degree of knowledge and skills in subject areas covered by a particular exam. Except for the recently introduced Seminar and Capstone courses and the AP Studio Art assessments, which consist of portfolio assessments, AP exams generally consist of a multiple-choice section and a free-response section. According to the College Board, a score of 3 suggests that the student is "qualified" to receive college credit, a score of 4 suggests a student is "well-qualified," and a score of 5 indicates that a student is "extremely well-qualified" to receive college credit.

The American Council on Education reviewed the AP program and recommended that colleges and universities award credit for AP scores of 3 or higher on AP examinations (American Council of Education, 2016). Table 1, outlines the recommended AP score descriptors and college course grade equivalents.

AP Exam	AP Recommendation	College Course
Score		Grade Equivalent
5	Extremely well qualified	A+ or A
4	Very well Qualified	A-, B+, or B
3	Qualified	B-, C+, or C
2	Possibly Qualified	
1	No recommendation	

**Table 1.** Advanced Placement scores and grade equivalents

Source: College Board

# **Methodology**

The THECB, in consultation with Texas public institutions of higher education (IHEs), the THECB's Undergraduate Education Advisory Committee (UEAC), and other interested parties, conducted a study on the performance of undergraduate students at Texas public IHEs who received undergraduate course credit for qualifying scores on one or more AP exams. The purpose of this study is to compare the academic performance, retention rates (persistence), and graduation rates, disaggregated by score, of students who completed a lower-division course at an IHE to students who received credit for that course based on a score of 3 or higher on an AP examination, as required by the statute.

This study examines two cohorts of first-time-in-college (FTIC) students who attended a Texas public institution of higher education:

Cohort 1 - AY 2013-14 Cohort 2 - AY 2016-17

#### **Approach and Data Collection**

THECB collected institutional credit policy and student-level data in a series of requests sent to all Texas public IHEs. In addition, the THECB and the College Board entered into a data sharing agreement, which allowed the College Board to provide THECB with AP exam data specifically needed for this study.

Task 1. Initial request sent to all IHEs chief academic officers (CAOs) to identify point of contact. THECB contacted all IHE CAOs and asked them to identify a point of contact to coordinate all AP data requests for purposes of the study.

Task 2. Request sent to IHEs to provide the AP-to-course credit crosswalks for Cohorts 1 and 2 FTIC students. In spring 2016, the THECB asked each IHE point of contact to submit information about its AY 2013-14 and AY 2016-17 AP "crosswalk," which is an alignment of specific lower-division courses with specific subject-area AP exams and scores. The THECB request also asked the IHEs point of contact for information about their conditions for granting course credit for AP exams in AY 2013-14 and AY 2016-17, including the identification of the specific course(s) for which credit may be awarded, the minimum score required on specific AP exams for credit, and the number of SCH the IHE granted to students who achieved required scores. Statements of Compliance were required from IHEs CAOs certifying that their IHE was following HB 1992 by fall 2016.

Task 3. Request sent to IHEs for data on cohorts 1 and 2 FTIC students awarded course credit for AP exam scores. In spring 2016, the THECB asked each IHE to submit a course-level student data file that identified every course for which AY 2013-14 FTIC students were awarded credit, based on their AP scores, within their first year of enrollment. In spring 2018, the IHEs provided a similar file for AY 2016-17 FTIC students. The information requested included student identifiers (name, date of birth, and student ID#), the AP subject exam name and score associated with the awarded course credit (if available), and the specific course information for each course for which credit was awarded. Course information consisted of the semester credit hours associated with the course, the course prefix and number, and the Texas Common Course Numbering System (TCCNS) number or TCCNS-equivalent for an undergraduate course. The data request is provided in Appendix B. Task 4. Specific-use data-sharing Aagreement with College Board for AP exams taken by cohort 1 and cohort 2 FTIC students. To facilitate the final comparison analysis required by statute, the THECB and the College Board executed a specific-use license agreement to allow the exchange of student data for the purpose of this study. First, the THECB provided the College Board a data file for each of the two FTIC student cohorts. The College Board then appended any information regarding all AP exams taken by each FTIC student to the file and returned it to the THECB. This dataset includes the name of the AP exam taken, the year it was administered to the student, and the score the student received.

## **Samples and Analyses**

THECB staff used quantitative methods to examine the two cohorts of FTIC students who attended a Texas public IHE and took AP exams prior to their enrollment in college. THECB staff then compared the academic performance, retention rates (persistence), and graduation rates of students who received college credit based on their AP exam score to similar students who actually enrolled and completed the course at an IHE. Academic performance was measured by grade point average (GPA), accumulation of course credit, and grade in the relevant subsequent course. Retention rates were measured based on persistence to the next academic year (i.e., freshman year to sophomore year). To measure graduation, THECB staff used a four-year graduation rate for the AY 2013-14 cohort only. This could not be done for the AY 2016-2017 cohort 2 students because they had only attended college for two academic years.

## **Initial Sample and Methods**

The initial analyses used all available data to describe the sample of FTIC students taking AP exams prior to entry into college, and whether they selected to receive credit for their qualifying scores. The cohorts in these analyses included all students who were FTIC in any semester in the academic year. All external data collected from the IHEs and the College Board were merged with the list of FTIC students identified by the THECB.

## **Final Sample and Methods**

The statute required that a comparison of academic outcomes be completed of students who enrolled in a lower-level course and those who received credit for that same course through qualifying AP scores. The sample of both comparison groups was limited to students who took the same AP exam and received the same qualifying score in order to make the groups more comparable. There are many academic factors that may affect each student's likelihood of taking an AP exam, as well as the academic outcomes being measured in this study. By making the main difference between the comparison groups how they received the course credit (taking the course in college or receiving credit based on AP), some of the unmeasured variation was eliminated. This allowed for a stronger conclusion regarding the effect of claiming course credit based on AP scores.

The final analyses also limited the sample to students with complete data who were FTIC in fall 2016, giving all the students in the sample the same amount of time to complete the academic outcomes measured. Because of these more stringent parameters in selecting this sample, the final analyses were run on a smaller number of observations than the initial descriptive analyses. All academic outcomes were measured using the Coordinating Board Management (CBM) data reported to the THECB every semester by all IHEs in Texas. These data include information on when the student was enrolled, what courses the student took while enrolled, and what grades the student earned.

## **Data Limitations in Quality and Availability**

Data quality and availability limited the types of analyses that were conducted for this this report. There was a heavy reliance on data provided by IHEs regarding the actual courses students were given credit for based on AP scores. The collection of these data by IHEs is not a regularly required data report and was a major request of the IHEs. Many IHEs student information systems are not set up to retain information about AP exams once the course is transcripted. Although 81 institutions provided course-level student data for their AY 2016-17 cohort, 32 IHEs were not able to provide full information on the AP exam that the course was based on. Additionally, information about graduation rates is limited in this study because it uses a four-year graduation rate. Graduation rates in higher education longitutitonal studies commonly use a six-year period as a standard, as does the THECB. Neither cohort has had sufficient time for six-year graduation rates to be calculated.

# **Descriptive Analysis**

This section provides descriptions for the students prior to and following passage of HB 1992. The following descriptions are provided:

- Description of institutions' AP crosswalks before and after HB 1992
- Description of students and AP corresponding exams taken and the course credit they received

## **IHE Credit Policies**

As of fall 2016, the majority (76%) of Texas IHEs have AP credit policies in place that allow them to award course credit for an AP score of at least 3. This is an increase from fall 2013, when only 40 percent of IHEs had such policies in place. The increase was most dramatic for the Texas general academic institutions, which increased from 14 percent to 65 percent from fall 2013 to fall 2016. Note that some schools did accept an AP Exam score of 2, but no institutions accepted a score of 1. However, there are 12 universities that required a score of 4 or higher on at least one AP exam to grant course credit. Table 2 displays the total number of institutions that accepted an AP score of at least 3 or lower on all AP exams for both years of the study.

		2013		2016		
	Total	General Academic	Community and Technical	Total	General Academic	Community and Technical
Institutions Accepting score of	INES	Institutions	Colleges	67	Institutions	Colleges
at least 3	36	5	31		22	45
IHEs reporting	89	35	54	88	34 <sup>2</sup>	54
Percent of IHEs reporting that						
least 3	40%	14%	57%	76%	65%	83%

**Table 2.** IHEs with policies that allow an AP Exam Score of  $\leq$  3 for the award of course credit

Source: THECB Survey of IHE AP Crosswalks

<sup>&</sup>lt;sup>2</sup> In 2015, The University of Texas-Pan American and The University of Texas at Brownsville merged and established The University of Texas Rio Grande Valley, thus reducing the number of four-year institutions by one.

Table 3 shows the percent of institutions that accepted an AP exam score of at least 3 for the most frequently accepted exams, as reported by the IHEs in the responses to the survey of institutional AP policies. After HB 1992 passed, all percentages increased for institutions that accepted an AP score of at least 3 for the top 15 most accepted AP courses. This suggests that the rate of qualifying credit increased for students who took the AP exams.

	20	13	2016	
	IHEs	%	IHEs	%
American/U.S. History	63	74.1%	83	97.6%
Biology	61	71.8%	82	96.5%
Calculus AB	71	83.5%	83	97.6%
Calculus BC	70	82.4%	79	92.9%
Chemistry	61	71.8%	79	92.9%
English Language & Composition	71	83.5%	80	94.1%
English Literature & Composition	55	64.7%	71	83.5%
Government and Politics: U.S	70	82.4%	80	94.1%
Macroeconomics	47	55.3%	63	74.1%
Microeconomics	44	51.8%	62	72.9%
Physics C: Electricity & Magnetism	49	57.6%	59	69.4%
Physics C: Mechanics	45	52.9%	57	67.0%
Psychology	51	60.0%	64	75.3%
Spanish Language & Culture	73	85.9%	80	94.1%
Statistics	51	60.0%	59	69.4%

<b>Table 3.</b> Thes that accepted a 5 of lower for createror the top 15 most negating taken Ar exam
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Source: Survey of IHE AP Crosswalks

Note: Percentages are calculated based on the response number of 85 IHEs. This is the number of IHEs that reported AP policies and crosswalks for both AY 2013 and AY 2016.

Note: In 2016, 10 IHEs reported accepting a score of 2 on Calculus BC and/or foreign language AP exams.

## **Students and AP Exam Credit Awarded**

The THECB's initial request to the IHEs for data on FTIC students awarded course credit for AP exams in AY 2013-14 showed that 19,068 students enrolling in all IHEs claimed course credit for 69,624 courses. In AY 2016-17, that number increased to 26,238 students enrolling in all IHEs claiming course credit for 202,718 courses (see Tables 4, 5 and 6). The mean number of SCH awarded to students at all IHEs for AY 2013-14 was 11.4, while the mean for AY 2016-17 was 24.12.

According to data provided by the College Board (see Table 4), about 28 pecent of the AY 2013-14 FTIC cohort had taken at least one AP exam prior to becoming a college student. This percentage increased to 30.5 percent for the AY 2016-17 FTIC cohort.

Students in the AY 2016-17 cohort took more AP exams, and the percentage of eligible students who claimed college credit based on their AP scores increased between the two cohorts. In AY 2013-14, 46 percent of students who scored at least a 3 on an AP exam claimed college credit in their first year of college. This increased to 60 percent for the AY 2016-17 FTIC cohort.

	2	013-14 FTIC (	Cohort	2016-17 FTIC Cohort		
Students	IHEs	General Academic Institutions	Community and Technical Colleges	IHEs	General Academic Institutions	Community and Technical Colleges
Total in cohort <sup>a</sup>	286,891	80,619	206,272	280,282	89,559	190,723
Took an AP exam prior to college enrollment <sup>b</sup>	80,475	47,532	32,943	85,379	53,754	31,625
Took an AP exam prior to college enrollment and earned a 3 or higher on at least one exam <sup>b</sup>	41,830	28,590	13,240	43,867	32,042	11,825
Received credit for achievement on AP exams <sup>c</sup>	19,068	17,358	1,710	26,238	24,240	1,998

Table 4. FTIC students who took AP exams and received course credit by cohort

<sup>a</sup> Source: THECB CBM data

<sup>b</sup> Source: College Board data

<sup>c</sup> Source: AP course credit data from IHEs

Note: Students were included in this sample if the institution indicated they were FTIC in any semester in the academic year

Table 5 shows that there was in increase in the number of AP exams taken by students from AY 2013-14 to AY 2016-17. This supports research that when students take more exams they create more opportunities to be eligible to claim credit. Claiming credit can help shorten their time to complete a certificate or degree.

Table 5. AP	Exams taken	by students i	in FTIC cohorts
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AP Exams	2013-14 FTIC Cohort			20	16-17 FTIC (	Cohort
	Total	General	Community	Total	General	Community
		Academic	and Technical		Academic	and Technical
		Institutions	Colleges		Institutions	Colleges
All Students	262,634	184,326	78,308	311,970	230,116	81,854
Students who earned a score of 3 or higher	117,760	92,587	25,173	137,106	114,361	22,745

Source: College Board data

There was an increase in the number of courses for which students were awarded credit for their qualifying AP exams. According to the College Board, a student has an opportunity to earn at least three college credits for each passing AP exam score (College Board, Senate Committee Hearing, 2018). Table 6 shows that the average number of courses claimed increased slightly from 3.4 to 3.8.

	2013-14 FTIC Cohort			2016-17 FTIC Cohort		
	All IHEs	Univ.	CTC	All IHEs	Univ.	CTC
Number of courses claimed for credit for AP	64,857	60,690	4,167	100,365	95,173	5,192
Average number of courses per student given credit for AP score	3.4	3.5	2.4	3.8	3.9	2.6
Average number of SCH given credit for AP score	10.6	10.9	8.3	11.9	12.2	8.6

Table 6. Number of courses claimed for credit based on AP exam scores

Source: Institutional AP data

Credit was awarded to students in almost all fields covered by the AP exams. For the 2013-14 FTIC cohort, the top five fields in which course credit was awarded to students were English (14,996 courses), history (12,233 courses), math and statistics (7,515 courses), Spanish (7,916 courses), and political science and government (3,804 courses), as shown in Table 7.<sup>3</sup>

		Number		Avg. SCH	Avg. Number
	Number of	of	Total	per	of Courses
	Courses	Students	SCH	student	per student
English	14,996	10,540	44,985	4.3	1.4
History	12,233	6,948	36,699	5.3	1.8
Math	7,515	6,041	28,046	4.6	1.2
Spanish	7,916	2,770	27,805	10.0	2.8
Political Science/Gov't	3,804	3,791	11,412	3.0	1.0
Chemistry	3,317	1,272	7,681	6.0	2.6
Physics	2,855	1,745	9,384	5.4	1.6
Biology	2,825	1,414	8,249	5.8	2.0
Economics	2,684	2,614	8,053	3.1	1.0
Psychology	2,476	2,471	7,428	3.0	1.0

 Table 7. Ten most reported subject fields claimed for credit by 2013-14 FTIC Cohort

Source: IHE AP data

<sup>&</sup>lt;sup>3</sup> Courses were grouped into subject areas as defined by the THECB

Credit was awarded to students in almost all fields covered by the AP Exams. For the 2016-2017 FTIC cohort, the top five fields in which course credit was awarded to students for qualifying AP exam scores were history (23,386 courses), English (18,257 courses), Spanish (13,368 courses), math and statistics (11,105 courses), and physics (5,507 courses), as shown in Table 8.<sup>4</sup>

	Number of	Number of	Total SCH	Avg. SCH	Avg.
	Courses	Students		per student	Number of
					per student
History	23,386	12,143	70,165	5.8	1.9
English	18,257	13,162	54,861	4.2	1.4
Spanish	13,368	4,882	46,736	9.6	2.7
Math	11,105	8,754	41,045	4.7	1.3
Physics	5,507	2,673	14,270	5.3	2.1
Political Science/Gov't	5,178	5,140	15,534	3.0	1.0
Economics	4,886	4,578	14,658	3.2	1.1
Biology	4,560	2,766	13,163	5.1	1.6
Psychology	3,706	3,697	11,140	3.0	1.0
Chemistry	3,451	1,568	8,331	5.3	2.2

**Table 8.** Ten most reported subject fields awarded credit for qualifying AP exam scores by

 2016-17 FTIC Cohort

Source: AP course credit data from IHEs

<sup>&</sup>lt;sup>4</sup> Courses were grouped into subject areas as defined by the THECB

# **Comparison Analysis**

HB 1992 directed the THECB to conduct a study on the performance of undergraduate students at IHEs who received undergraduate course credit by achieving required scores on one or more AP exams. The purpose of this section is to present the findings from comparing students who completed a lower-division course at an institution to students who received credit for that course based on their AP exam score.

Comparative analyses were not performed on some of the most common AP exams. If there were not enough students who opted to take the lower-level course while in college, the analyses were not conducted. For example, of the students who earned a 3 or higher on the English Language and Composition exam, only 60 took ENGL 1301 (freshman composition, the first English course that most college students take) in their first year of college.

The tables presented in this section provide the comparisons of key academic outcomes between similar students who took a lower-level course and students who received college credit for that lower-level course based on their AP exam scores. The comparisons required data on AP exam scores, the courses for which credit was given for qualifying AP scores, and course-taking in the first year of college. The samples for the analyses were made by identifying the most common AP exam and lower-level course pairs. These pairs were: U.S. History AP exam paired with U.S. History (HIST 1301), Calculus AB AP exam paired with Calculus I (MATH 2413), Macroeconomics AP exam paired with Macroeconomics (ECON 2301), Biology AP exam paired with Biology for Science Majors I (BIOL 1306/1406), and Physics I AP exam with University Physics I (PHYS 2325/2425).

Although the comparisons were made among students who scored similarly on the same AP exam, the following analyses does not employ advanced statistical matching techniques that help control for differences between the two groups. It is important to note that unmeasured factors, such as student motivation and confidence in the subject, the student's major, and the total number of AP courses the student received credit for, may affect whether a student chose to take the course in college and may affect academic success outcomes.

#### **Academic Outcomes**

The first comparison in this section measures academic outcomes for the 2016 cohort. These students were FTIC in fall 2016, scored a 3 or higher on the specified AP exam, and either received credit for, or took the corresponding lower-level course within their first year of college enrollment. For the U.S. History, Macroeconomics, and Physics I AP exams, there were enough students to make comparisons; however, there were not enough students in each score breakout to show these comparisons separated by score. The tables that follow show the comparisons of all students who scored a 3 or higher on the AP exam and either received credit for, or took the corresponding lower-level course.

Students who took the U.S. History course had lower academic outcomes than students who received credit for U.S. history based on their AP score. Those who received credit had a higher one-year persistence rate, a slightly higher total earned SCH, and a higher overall GPA.

**Table 9.** Academic outcomes for FTIC 2016 students who tookU.S. History AP exam by type of credit earned for U.S. History course (scores 3, 4, and 5)

Measures	Received Credit for U.S. History	Took U.S. History Course
Number of Students	9,072	558
Total SCH in Yr 1	29.0	27.2
Yr 1 Overall GPA	3.4	3.0
Persistence to Yr 2	95.6%	84.0%

Source: AP course credit data from IHEs

Note: "Total SCH in Yr 1" does not include AP credits

Academic outcomes for students who took Calculus I compared to students who received credit for Calculus I were similar for most measures. As expected, students with higher AP exam scores tend to have more favorable academic outcomes. However, the difference between the comparison groups within each score are similar and may suggest there are no major advantages to taking Calculus I over accepting AP credit.

**Table 10.** Academic outcomes for FTIC 2016 all students who tookCalculus AB AP exam by type of credit for Calculus I course

Measures	Credit for Calculus I	Took Calculus I Course	
Number of Students	2,799	1,388	
Total SCH in Yr 1	29.2	28.9	
Yr 1 Overall GPA	3.4	3.2	
Persistence to Yr 2	94.4%	95.4%	

Source: AP course credit data from IHEs

Note: "Total SCH in Yr 1" does not include AP credits

**Table 11.** Academic outcomes for FTIC 2016 all students who took Calculus AB AP exam by type of credit for Calculus I course by AP exam score

	AP Exam S	core of 3	AP Exam S	core of 4	AP Exam Score of 5	
Measures	Credit for Calculus I	Took Calculus I Course	Credit for Calculus I	Took Calculus I Course	Credit for Calculus I	Took Calculus I Course
Number of Students	725	520	1,110	420	964	448
Total SCH in Year 1	28.6	28.9	28.9	28.9	30.0	29.0
Year 1 Overall GPA	3.3	3.1	3.4	3.1	3.6	3.4
Persistence to Yr 2	93.2%	94.2%	95.0%	96.2%	94.7%	95.9%

Source: AP course credit data from IHEs

Note: "Total SCH in Yr 1" does not include AP credits

Similar to the U.S. History findings, students who took the Macroeconomics AP exam and claimed credit for the college course had a slightly higher persistence rate and overall GPA than their counterparts who took the Macroeconomics course in college. **Table 12.** Academic outcomes for FTIC 2016 students who took Macroeconomics AP Exam by type of credit earned for macroeconomics course (scores 3, 4, and 5)

Measures	Credit for Macroeconomics	Took Macroeconomics Course
Number of Students	3,685	176
Total SCH in Yr 1	29.3	29.0
Yr 1 Overall GPA	3.5	3.4
Persistence to Yr 2	95.7%	93.8%

Source: AP course credit data from IHEs

Note: "Total SCH in Yr 1" does not include AP credits

The persistence rate for all students in the Biology AP sample was similar; however, there are differences by AP score. Students who scored a 3 or 4 on the Biology AP exam and claimed credit for the Biology I course had slightly lower persistence rates than students who took Biology I. The total SCH earned and first year GPA were similar between groups within each AP score sample.

**Table 13.** Academic outcomes for FTIC 2016 students who took Biology AP Exam by type of credit earned for Biology for Science Majors I course

Measures	Credit for Biology	Took Biology for Science Majors I Course
Number of Students	802	1,206
Total SCH in Yr 1	29.8	30.0
Yr 1 Overall GPA	3.5	3.4
Persistence to Yr 2	95.1%	95.7%

Source: AP course credit data from IHEs

Note: "Total SCH in Yr 1" does not include AP credits

**Table 14.** Academic outcomes for FTIC 2016 students who took Biology AP Exam by type of credit earned for Biology for Science Majors I course by AP exam score

	AP Exam Score of 3		AP Exam Score of 4		AP Exam Score of 5	
Measures	Credit for Biology I	Took Biology I Course	Credit for Biology I	Took Biology I Course	Credit for Biology I	Took Biology I Course
Number of						
Students	222	783	395	360	185	63
Total SCH in Yr 1	29.3	29.9	29.5	30.0	30.9	31.3
Yr 1 Overall GPA	3.3	3.3	3.5	3.5	3.7	3.8
Persistence to Yr 2	91.4%	94.6%	96.7%	98.1%	96.2%	96.8%

Source: AP course credit data from IHEs

Note: "Total SCH in Yr 1" does not include AP credits

Although the persistence rates across all AP scores for University Physics I are similar, students who claimed credit for University Physics earned slightly lower number of first-year total SCH than their counterparts who took the course in college.

Table 15.	Academic	outcomes	for FTIC 20	16 students	who took	Physics I A	P Exam l	by type of a	credit
earned for	University	Physics I d	course			-			

Measures	Credit for Physics I	Took Physics I Course
Number of Students	601	361
Total SCH in Yr 1	29.8	31.3
Yr 1 Overall GPA	3.5	3.3
Persistence to Yr 2	95.5%	95.3%

Source: AP course credit data from IHEs

Note: "Total SCH in Yr 1" does not include AP credits

Table 16.	Academic	outcomes f	for FTIC	2016	students v	who took	Physics I	AP Ex	xam b	y type o	f credit
earned for	University	Physics I c	ourse by	AP e	xam score	2					

	AP Exam Score of 3		AP Exam Score of 4		AP Exam Score of 5	
	Credit for Physics I	Took Physics I Course	Credit for Physics I	Took Physics I Course	Credit for Physics I	Took Physics I Course
Number of						
Students	209	246	278	97	114	18
Total SCH in Yr 1	29.6	31.2	29.9	31.8	30.0	31.0
Yr 1 Overall GPA	3.3	3.3	3.4	3.5	3.8	3.7
Persistence to Yr 2	93.8%	94.7%	95.7%	96.9%	98.2%	94.4%

Source: AP course credit data from IHEs

Note: "Total SCH in Yr 1" does not include AP credits

## **Graduation Rates**

The second set of comparisons shows four-year graduation rates for the 2013-14 AP cohort that was FTIC in fall 2013. The AY 2013-14 FTIC cohort data were used to assess the graduation rates, as students in the AY 2016-17 cohort have not attended college for four years. The graduation rate includes bachelor's degrees or higher. It is important to note that these students first enrolled in college prior to the passage of HB 1992. A four-year graduation rate is not shown for the Physics I AP exam and University Physics I pair because the Physics I AP exam began in 2013. The students in this cohort did not have a chance to take the Physics I AP exam before college enrollment.

Table 17 shows the four-year graduation rate for the FTIC 2013 cohort of students. Students who received credit for the course had a much higher four-year graduation rate than did the students who took the U.S. History course.

**Table 17.** Four-year graduation rate for FTIC 2013 students who took U.S. History AP Exam by type of credit earned for U.S. History course (scores 3, 4, and 5)

	Credit for U.S.	Took U.S.
	History	History Course
Number of Students	5,588	809
Graduated in 4 years	60.6%	32.9%

Source: AP course credit data from IHEs

Similarly, Table 18 shows that students who received credit for their AP exam scores had a higher four-year graduation rate than students who took the course.

**Table 18.** Four-year graduation rate for FTIC 2013 students who took Calculus AB AP Exam by type of credit earned for Calculus I course

	AP Exam Score of 3		AP Exam	Score of 4	AP Exam Score of 5	
Measure	Credit for Calculus I	Took Calculus I Course	Credit for Calculus I	Took Calculus I Course	Credit for Calculus I	Took Calculus I Course
Number of						
Students	456	378	619	179	483	131
Graduated in 4						
Years	55.9%	38.6%	56.0%	53.1%	56.5%	48.8%

Source: AP course credit data from IHEs

Table 19 shows that the four-year graduation rate for FTIC 2013 cohort students was similar for both students who recieved credit based on their AP exam score and for students who completed the course.

**Table 19.** Four-year graduation rate for FTIC 2013 students who took Macroeconomics AP Exam by type of credit earned for Macroeconomics course (scores 3, 4, and 5)

		Took
	Credit for	Macroeconomics
	Macroeconomics	Course
Number of Students	2,130	138
Graduated in 4 years	63.6%	61.6%

Source: AP course credit data from IHEs

Table 20 shows that students who took the Biology AP exams and scored a 3 or 4, students had a must lower percentage of students who graduated in four years. However, there was almost no difference for students with AP exam scores of 5.

	Score	e of 3	Score	of 4	Score of 5					
	Credit for Biology I	Took Biology I Course	Credit for Biology I	Took Biology I Course	Credit for Biology I	Took Biology I Course				
Number of Students	185	500	294	280	223	39				
Graduated in 4 Years	41.6%	54.8%	65.9%	71.0%	71.3%	71.8%				

**Table 20.** Four-year graduation rate for FTIC 2013 students who took Biology AP Exam by type of credit earned for Biology I for Science Majors course

Source: AP course credit data from IHEs

With the exception of Biology, four-year graduation rates were higher for students who claimed credit for the lower-level course rather than taking the course in college. It is important to note that these graduation rates were measured at an earlier point than the state's usual six-year graduation outcome.

#### **Sequent Course Outcomes**

The final comparison analysis shows performance in sequent courses of students who took the lower-level course and those who received credit based on their AP score for the lower-level course. The samples for these comparisons are limited to courses that have a clear sequent course after the lower-level course. The following tables focus on courses in the STEM fields as they had the only clear, sequent courses in their pathway that THECB staff could use for the purposes of this report. Staff was unable to include a table for physics because there were not enough students in the original sample who took University Physics II, the sequent course to University Physics I.

For both Calculus II and Biology II, passing rates were higher for students who chose to take the lower-level course rather than claiming credit (see Tables 21 and 22). These patterns are clear within each score breakdown for Calculus II, but the largest difference is for students who scored a 3 on the Calculus AB exam. However, note that the passing rate for all students taking Biology II for Science majors in fall 2016 was 76.9 percent, and for all students taking Calculus II, it was 71.0 percent. Students who scored a 3 or higher on the corresponding AP exam tended to have higher rates of passing in the sequent course than the general student population, whether they took the lower-level course or claim credit for that course.

Table 21. Calculus II outcomes for students who took Calculus AB AP Exam by	
type of credit for Calculus I course	

	Score	e of 3	Score	of 4	Score of 5		
	Credit for Calculus I	Took Calculus I Course	Credit for Calculus I	Took Calculus I Course	Credit for Calculus I	Took Calculus I Course	
Number of							
Students	188	365	345	315	343	380	
Passed Calculus II	74.5%	88.5%	85.8%	88.9%	93.6%	94.2%	

Source: AP course credit data from IHEs

**Table 22.** Biology II outcomes for students who took

 Biology AP Exam by type of credit for Biology I course

	<u> </u>	
	A	
	Credit for Biology I	Took Biology I Course
Number of Students	47	751
Passed Biology II	91.5%	97.0%

Source: AP course credit data from IHEs

# **Recommendations**

To support the completion goal in the state's *60x30TX* higher education strategic plan, productive and creative ways must be available to assist students in attaining their degrees. One way to support the *60x30TX* completion goal is to encourage students to take AP coursework in high school that will allow them to earn college credit, thus accelerating their academic progress toward a college degree. In addition, the student debt goal in *60x30TX* is supported by students taking AP coursework in high school because it reduces time to degree and debt.

#### **Final Report Recommendations**

Students who received credit for a lower-level course based on an AP exam performed academically similar to students who opted out of receiving credit and took the lower-level course in college. The data supports the claim that there is no clear differentiation between taking the lower-level course or claiming credit for qualifying AP exams.

**Recommendation 1.** Upon awarding course credit for an AP exam, Texas public institutions of higher education should document the AP exam subject title and score corresponding to each course for which credit is awarded so that institutions are able to conduct analysis on their AP polices and processes.

**Recommendation 2.** Upon awarding course credit for an AP exam, Texas public institutions of higher education should ensure the credit is applicable towards the degree, as appropriate, and used to satisfy degree requirements.

**Recommendation 3.** Higher education admission offices should help ensure that students claim the credit they have earned to save tuition and accelerate students' progress toward graduation. Although the percentage of eligible AP test-takers who received credit for their AP scores increased between 2013 and 2016, in 2016 40 percent of students who qualified to be granted course credit, based on their AP scores, did not receive it.

Based on the comparisons from the data, students should claim credit for qualifying AP exams. The data revealed students that claimed credit and scored a 3, 4, or 5 on the top five most-taken AP exams still have similar GPAs and persistence rates as students who took the lower-level courses. In addition, data revealed, based on the FTIC 2013-2014 cohort, that, overall, students who claimed credit on the top four most-taken AP exams had a higher four-year graduation rate than the students who took the lower-level course. The exception to this was the Biology AP exam, for which students who took Biology for Science Majors I had a higher graduation rate than those that claimed credit for the same course. Note that these graduation rates are measured sooner than the usual six-year span the THECB uses for graduation rates.

The data shows that, overall, students who claim course credit for qualifying AP scores have no worse outcomes than those that take the same lower-level course in college. Enrolling in college with some college credits already transcripted may help students move through their degree programs more quickly—especially if they are able to avoid taking courses in the core curriculum that are not directly related to their major. The sequent course analysis show that for the students who go on to take a sequent course in calculus or biology, taking the course is associated with a higher passing rate. Note that the students in this particular sample are selective, and likely are STEM majors.

## Conclusion

According to the College Board, a student's opportunity to earn college credit for qualifying AP exams translated to over \$265 million in total potential tuition savings for the state's students and families in 2017 (Joint Hearing Texas Senate, 2018). AP programming can provide students with the benefits of savings in time and college costs (Kleiner & Lewis, 2005). These findings and recommendations are aligned and support the completion and student debt goals of the *60x30TX* higher education strategic plan.

## References

- Adelman, C. (2006). The Tool Box Revisited: Paths to Degree Completion from High School through College. Washington, D.C.: U.S. Department of Education.
- American Council on Education. (2016). The national guide to college credit for workforce training: College Board Advanced Placement Examinations (ACE credit). College Credit Recommendation Service. Retrieved from <u>http://www2.acenet.edu/credit/</u> <u>?fuseaction=browse.getOrganizationDetail&FICE=300271</u>
- Bailey, T., & Karp, M. M. (2003). Promoting college access and success: A review of creditbased transition programs.
- College Board. (2016). "AP courses and exams." AP Higher Education. Retrieved from https://aphighered.collegeboard.org/exams
- College Board. (2016). "AP credit-granting recommendations." AP Higher Education. Retrieved from https://aphighered.collegeboard.org/setting-credit-placement-policy/creditgranting-recommendations
- Dougherty, C., Mellor, L., & Jian, S. (2006, Feb). The relationship between Advanced Placement and college graduation. 2005 AP Study Series, Report 1. Austin, TX: National Center for Educational Accountability.
- Joint Hearing: Senate Committee on Education, Senate Committee on Higher Education: Dual Credit, Texas Senate, 84<sup>th</sup> Texas Legislature (2018) (testimony by Melanie Storey, Senior Director, Higher Education and Student Aid Policy The College Board)
- Kleiner, B. , & Lewis, L. (2005). Dual Enrollment of High School Students at Postsecondary Institutions: 2002-2003. NCES 2005-008. Washington, D.C.: U.S. Department of Education, National Center for Educational Statistics.
- Mattern, K., Marini, J., & Shaw, E. (2013). Are AP students more likely to graduate from college on time? College Board Research Report 2013-5. New York: The College Board.
- Murphy, D., & Dodd, B. (2009). A comparison of college performance of matched AP and non-AP student groups. College Board Research Report 2009-6. New York: The College Board.
- Pascarella, E. T., & Terenzini, P. T. (2005). From high school to college, Volume 2. San Francisco: Jossey-Bass.
- Pascarella, E. T., & Terenzini, P. T. (2005). How college affects students: a third decade of research, Volume 2. San Francisco: Jossey-Bass.
- Patterson, B., & Ewing, M. Validating the use of AP Exam scores for college course placement. College Board Research Report 2013-2. New York: The College Board.

- Smith, J., Hurwitz, M., & Avery, C. (2015). Giving college credit where it is due: Advanced Placement Exam scores and college outcomes. (No. w21147). Cambridge, MA: National Bureau of Economic Research.
- Venezia, A., Kirst, M.W, & Antonio, A.L. (2003). Betraying the college dream: How disconnected K-12 and postsecondary education systems undermine student aspirations. Palo Alto, CA: Stanford Institute for Higher Education Research, The Bridge Project.
- Venezia, A., & Jaeger, L. (2013). Transitions from high school to college. *The Future of Children, 23*(1), 117-136. Retrieved from <u>http://www.jstor.org/stable/23409491</u>
- Virtual Learning Academy. (2018, September 11). 5 benefits of early college programs in high school. Retrieved from <a href="https://vlacs.org/5-benefits-early-college-programs-high-school/">https://vlacs.org/5-benefits-early-college-programs-high-school/</a>

# **Appendix A**

# Texas Higher Education Coordinating Board Institutional and Chief Academic Officer Signature Page for Compliance

#### House Bill 1992 (84th Legislature), "An Act Relating to the Granting of Undergraduate Course Credit by Advanced Placement Examination at Public Institutions of Higher Education."

1. Section 51.968 (b), Education Code, requires each institution of higher education (IHE) that offers freshman-level courses to adopt and implement a policy to grant undergraduate course credit to entering freshmen students who have achieved required scores on one or more examinations in the Advanced Placement (AP) Program.

Section 51.968 (c), Education Code, requires each IHE to (1) establish the institution's conditions for granting course credit, including the minimum required scores on AP exams; and (2) identify the specific course credit or other academic requirements of the institution, including the number of semester credit hours or other course credit that the institution will grant to a student who achieves required scores on AP examinations.

3. The 84th Legislature passed HB 1992, which amends Section 51.968. In establishing the minimum required score on an Advanced Placement examination for granting course credit for a particular lower-division course under Subsection (c), an institution of higher education **may not require a score of more than three unless the institution's chief academic officer determines, based on evidence, that a higher score on the examination is necessary to indicate a student is sufficiently prepared to be successful in a related, more advanced course for which the lower-division course is a prerequisite.** 

I certify that \_\_\_\_\_\_ (Institution) is in compliance with the criteria specified by Section 51.968, Education Code, as amended by H.B. 1992, and have determined, for any course credit for which an Advanced Placement score of 4 or higher is required, that this decision has been made based on documented evidence, and is necessary to ensure that students are sufficiently prepared to be successful in a related, more advanced course for which that course is a prerequisite.

Chief Academic Officer

Date

# **Appendix B**

# Texas Higher Education Coordinating Board Student-Level Course Credit Data (AY 2016-2017) for Advanced Placement Report

Your institution is being asked to submit data as part of a request mandated by HB 1992 (84<sup>th</sup> Legislature). HB 1992 instructs the Texas Higher Education Coordinating Board (THECB) to conduct research and compile a report on the academic performance of students who received course credit based on AP Exam scores. **The requested student-level course credit data file will reflect the individual courses for which your institution's First Time in College (FTIC) students were awarded credit on their transcript based on their AP Exam scores in the 2016-2017 academic year.** 

Submit the comma-separated values (csv) file electronically to the THECB via Secure FTP (See the "Submission Process" instructions on pg. 4) by **March 30, 2018.** 

For questions regarding the compilation and submission of this data file, or the AP requirement or report, please contact Melissa Humphries in the Division of Strategic Planning and Funding at <u>Melissa.Humphries@thecb.state.tx.us</u> or (512) 427-6546.

#### **Data File Instructions:**

Submit the following data as <u>one</u> csv file. You may use the Excel sheet provided as a template for compiling your data. If this Excel sheet is used, save it in csv format before submitting it to the THECB. Please name your file: APStudentData2016\_"schoolname" (example: APStudentData2016\_UTSA").

The data file should contain information on each course for which First Time in College (FTIC) students in Summer 2016 through Summer 2017 were awarded credit based on their AP Exam scores. FTIC students are students who were entered as a '1' on item #9 ("Transfer Student or First-Time in College") on the CBM001 in Summer 2016, Fall 2016, Spring 2017 or Summer 2017 semesters (see the description on Item #9 in the CBM001 Manual for further clarification on this item, if needed). Only enter course information if it was awarded to the student based on an AP Exam and score submitted to your institution. There should be one observation per course awarded per student (similar to the data reporting structure of the CBM00S). If an FTIC student was awarded credit based on an AP Exam for more than one course during this year, the institution and student information (Fields #1-#6) will be repeated for each course entered. Each row in the file should represent a separate course.

If your institution did not award any course credit for AP Exams to FTIC Students in AY 2016-2017, please have your institution's Chief Reporting Official sign the attached "Notification of No Student Data\_AP2016\_2017" indicating you have no student data to report to us. Submit this form to <u>Melissa.Humphries@thecb.state.tx.us</u>.

The file should include the following items for each course entry (follow the format provided shown in the Record Layout on pg. 5 or shown in the attached Excel sheet):

Field #1	Institution Code. Enter the FICE Code of your institution.
Field #2	<u>Student Identification Number</u> . Enter the Social Security number of the student. The institution will assign unique (nine-digit) identification numbers to students without Social Security numbers. This is the same identification number (or SSN) that is reported to THECB for CBM reporting.
Field #3	Student Last Name. Enter the student's last name. Truncate if the name contains over 20 characters.
Field #4	Student First Name. Enter the student's first name. Truncate if the name contains over 10 characters.
Field #5	Student Middle Name Initial. Enter the initial of the student's middle name.
Field #6	Student Date of Birth. Enter all four digits of the year, the month and day of birth of the student (YYYYMMDD). If the date of birth is unknown, enter '00000000'.
Field #7	<u>Course Subject Prefix</u> . Enter the subject abbreviation of the course for which the student was awarded credit based on an AP Exam and score. Enter the prefix as established by the institution.
Field #8	<u>Course Number</u> . Enter the course identification number of the course for which the student was awarded credit based on an AP Exam and score.
Field #9	<u>TCCN Equivalent Subject Prefix</u> . For Universities: Enter the Texas Common Course Numbering System subject prefix for the course.
Field #10	<u>TCCN Equivalent Course Number</u> . For Universities: Enter the Texas Common Course Numbering System course number for the course.
Field #11	Semester Credit Hour Value. Enter the number of semester credit hours for the course reported in Fields #7 and #8.
Field #12	Grade/Credit Assigned.Indicate the code that corresponds to the specific grade/credit awarded for the course reported in Fields #7 & #8. (Note: These codes correspond to reporting for the CBM00S.)1A2B3C4D8Credit/Passed
Field #13	<u>Associated AP Exam (if available)</u> . Enter the code corresponding to the AP Exam for which this course was awarded credit. If this information is not stored in your data systems, please leave this field blank.

- 01 Art History
- 02 Biology
- 03 Calculus AB
- 04 Calculus BC
- 05 Chemistry
- 06 Chinese Language and Culture
- 07 Computer Science A
- 08 Economics: Macro
- 09 Economics: Micro
- 10 English Language and Composition
- 11 English Literature and Composition
- 12 Environmental Science
- 13 European History
- 14 French Language and Culture
- 15 German Language and Culture
- 16 Government and Politics: Comparative
- 17 Government and Politics: U.S.
- 18 Human Geography
- 19 Italian Language and Culture
- 20 Japanese Language and Culture
- 21 Latin
- 22 Music Theory
- 23 Physics B
- 24 Physics C: Mechanics
- 25 Physics C: Electricity and Magnetism
- 26 Psychology
- 27 Spanish Language
- 28 Spanish Literature and Culture
- 29 Statistics
- 30 Studio Art: Drawing
- 31 Studio Art: 2-D Design
- 32 Studio Art: 3-D Design
- 33 U.S. History
- 34 World History
- 35 Physics 1
- 36 Physics 2
- 37 Seminar
- 38 Research
- Field #14 <u>Student's AP Score (if available)</u>. Enter the AP Exam score (Range: 1 5) the student received for the corresponding exam indicated in Field #13 for which this course was awarded credit. If this information is not stored in your data systems, please leave this field blank.

Field #15 <u>Date awarded</u>. Enter the date this course credit was awarded to the student by your institution (if available). Enter in format (YYYYMMDD). If date is unknown, enter '00000000'.

## **Submission Process**

- 1. The designated representative from the institution shall compile and prepare the data consistent with the instructions in this file.
- 2. The Reporting Official for this institution shall submit the report to the Output directory in the Coordinating Board's secure ftp server by **March 30, 2018**. An institution's Reporting Official is typically either the Registrar or the head of Institutional Research.
- The Reporting Official shall notify Melissa Humphries at <u>Melissa.Humphries@thecb.state.tx.us</u> and cc Victor Reyna at <u>Victor.Reyna@thecb.state.tx.us</u> that the report is available in the **Output Directory**.

# **Record Layout**

Field #1	Institution Code	(FICE Code)	Numeric
Field #2	Student ID		Alphanumeric – 9 digits
Field #3	Last Name		20 characters
Field #4	First Name		10 characters
Field #5	Middle Initial		1 character
Field #6	Date of Birth		YYYYMMDD
Field #7	Course Subject Prefix		Character
Field #8	Course Number		Numeric
Field #9	TCCN Subject Prefix		Character
Field #10	TCCN Course Number		Numeric
Field #11	Course SCH		Numeric
Field #12	Grade/Credit Code		1 digit
Field #13	AP Exam Code		2 digits
Field #14	AP Score		1 digit
Field #15	Date Credit Awarded		YYYYMMDD

# **Reporting Examples**

1. An FTIC University student received course credit for his AP English Composition Exam score of 4 (ENGL 1301 and ENGL 1302), and a Physics 1 Exam score of 3 (PHYS 1401 &1402) in Fall 2016.

Credit ded
Date Awan
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20160820
3

2. An FTIC student at a 2-year institution received course credit for her AP Biology Exam score of 3 (BIOL 1306) in Spring 2017.

	А	в	С	D	E	F	G	Н	1	J	К	L	м	N	U
1	<sup>Institutio</sup> n Code	Student ID (SSN)	Student Last Name	<i>Stude<sub>nt</sub> First Name</i>	<sup>St</sup> ude <sub>nt</sub> Midd <sub>le</sub> Initial	<sup>St</sup> ude <sub>nt</sub> DO <sub>B</sub>	Co <sub>urse</sub> Subject Prefi <sub>x</sub>	Course Number	<sup>T</sup> CCN <sup>Subject</sup> Prefi <sub>x</sub>	<sup>T</sup> CC <sub>N</sub> Course Number	sc <sub>H</sub>	<sup>Grade</sup> / <sup>Credit</sup> <sup>Code</sup>	Ap <sub>Exam</sub> Code	Ap Score	<sup>Date Credit</sup> Awarded
2	123456	123456789	Doe	Jane	Α	19950808	BIOL	1306			4	8	02	3	20170112

# Appendix C

# Texas Higher Education Coordinating Board Notification of No Student Data for the Advanced Placement Student Data Report AY 2016-2017

INSTITUTION: [Insert Legal Institution Name Here]

[Insert 6-digit FICE code here]

DATE: [Enter date of certification, i.e., today's date]

I certify that our institution has no FTIC students who were awarded course credit based on AP Exam Scores during the 2016-2017 Academic Year, and therefore has no student data to submit to the Texas Higher Education Coordinating Board.

Name of Chief Reporting Official: [Insert Full Name]

Signature of Chief Reporting Official



This document is available on the Texas Higher Education Coordinating Board website.

#### For more information contact:

Dr. Audra Patridge Academic Quality and Workforce Texas Higher Education Coordinating Board P.O. Box 12788 Austin, TX 78711 PHONE 512-427-6232 FAX 512-427-6168 audra.patridge@thecb.state.tx.us