### OFFICE OF CHIEF OF RESEARCH AND DEVELOPMENT Summary of State Board of Education Agenda Items Consent Agenda September 15, 2016

#### OFFICE OF DISTRICT ACCREDITATION

C. Begin the Administrative Procedures Act Process to revise Appendix A of the Mississippi Public School Accountability Standards to allow the substitution of Computer Science in lieu of the Business and Technology requirement for graduation

Background Information: On August 16, 2016, the Commission on School Accreditation approved the revision of Appendix A of the *Mississippi Public School Accountability Standards, 2016*, to allow the substitution of Computer Science in lieu of the Business and Technology requirement for graduation. During school year 2016-2017, approximately 32 school districts are teaching Computer Science to 8<sup>th</sup> and 9<sup>th</sup> grade students. It is the goal of the Office of Secondary Education to add additional schools to this pilot over the next three (3) years until all school districts have phased in Computer Science K-12. During this transition, students will have the option of using either Technology or Computer Science to meet the current Business and Technology requirement needed for graduation.

Recommendation: Approval

Back-up material attached

#### **APPENDIX A-1**

#### GRADUATION REQUIREMENTS STANDARD 14

#### DISTRICT OPTION

Note: This option may be offered by districts, but it is not required.

Each student graduating from a secondary school in an accredited school district will have earned the required Carnegie units as specified in the following table. Contents of each required and elective course must include the core objectives identified in the Mississippi Curriculum Frameworks. Course titles and identification numbers must appear in the current edition of the Approved Courses for Secondary Schools of Mississippi. (See 7 Miss. Admin. Code Pt. 3, Ch. 28, R. 28.2, R. 28.3.) Enrollment in online and correspondence courses listed in this book must have prior approval granted by the principal. No more than one (1) of the minimum required number of units may be earned through completion of an approved correspondence course.

Any student who completes the minimum graduation requirements as specified below and has achieved a passing score on each of the required high school exit examinations is eligible to receive a high school diploma. The local school district may establish additional local requirements approved by the local school board as authorized under MS Code § 37-16-7.

CURRICULUM AREA	CARNEGIE UNITS	REQUIRED SUBJECTS	
ENGLISH	41	English I	
		English II	
MATHEMATICS	4 <sup>2</sup>	Algebra I or Integrated Math I	
SCIENCE	3 <sup>3</sup>	Biology I	
SOCIAL STUDIES		1 World History <sup>4</sup>	
	3	1 U.S. History <sup>4</sup>	
		½ U.S. Government	
		½ Mississippi Studies <sup>5</sup>	
HEALTH	1⁄2 <sup>6&amp;7</sup>	Contemporary Health <sup>10</sup>	
BUSINESS and TECHNOLOGY TECHNOLOGY OR COMPUTER SCIENCE	18	1 Information and Communication Technology (ICT) II or 1 Science, Technology, Engineering & Mathematics (STEM) or 1 Technology Foundations or ½ Keyboarding and ½ Computer Applications or Keystone or	
THE ARTS	1	Computer Science 11 Any approved 500.000 course	
ELECTIVES	4½9		
TOTAL UNITS REQUIRED	21		

APPENDIX A-1 (Continued)

# GRADUATION REQUIREMENTS STANDARD 14 DISTRICT OPTION

¹Compensatory English, Compensatory Reading, and Compensatory Writing may not be included in the four (4) English courses required for graduation; however, these courses may be included in the four and one-half (4½) general electives required for graduation. Beginning school year 2014-2015, Compensatory English may only be taken if a credit-bearing English course is taken in the same school year. MYP-English I and MYP English II are accepted in lieu of the English I and English II requirements for students enrolled in the IB program.

<sup>2</sup>Compensatory Mathematics and any developmental mathematics course may not be included in the four (4) mathematics courses required for graduation; however, these courses may be included in the four and one-half (4½) general electives required for graduation. Beginning school year 2014-2015, Compensatory Mathematics may only be taken if a credit-bearing Math course is taken in the same school year. Beginning school year 2004-2005 for all entering eighth graders, at least one (1) of the four (4) required mathematics courses must be higher than Algebra I or Integrated Math I. The allowable mathematics courses that can be taken which are higher than Algebra I are: Geometry, Integrated Math II, Algebra II, Integrated Math III, CCSS Advanced Math Plus, Algebra III, SREB Math Ready, Calculus, AP Calculus AB, AP Calculus BC, and AP Statistics. Advanced Algebra, Trigonometry, Pre-Calculus, Discrete Mathematics, and Statistics meet this requirement if taken prior to the 2015-2016 school year. One (1) of the four (4) required mathematics units may be in Architecture & Drafting if the student completes the twocourse sequence for Architecture & Drafting I & II. Effective with the eighth graders of 2004-2005, Pre-Algebra, Transition to Algebra, and Algebra I, may be taken in the eighth grade for Carnegie unit credit. Pre-Algebra and Transition to Algebra are no longer available after the 2013-2014 school year. Carnegie units may be earned by seventh and eighth graders effective with school year 2014-2015 for the following courses: CCSS Compacted Math Grade 7, CCSS Math Grade 8, CCSS Compacted Math Grade 8 (with Integrated Math I), and CCSS Math Grade 8 (with Algebra I/Traditional). MYP Geometry, MYP Algebra II, IB-DP Mathematics I, IB-DP Mathematics II, IB-DP Mathematical Studies I, IB-DP Mathematical Studies II are allowable mathematics courses higher than Algebra I for IB students.

<sup>3</sup>One (1) unit may be in Concepts of Agriscience or Introduction to Agriscience, and a second unit may be earned by completing two (2) of the following three (3) courses: Science of Agricultural Plants, Science of Agricultural Animals, or Science of Agricultural Environment. Two (2) units may be in the following courses if the student completes the required course sequence ending with Healthcare & Clinical Services II, Aquaculture II, Forestry II, Robotics/Engineering II, Polymer Science II or Careers in Polymer Science, Horticulture II or Horticulture Landscape and Turf grass, Engineering II or Applied Engineering Concepts, Health Sciences II or Workplace and Employment Skills in Health Sciences. The allowable lab-based physical science courses are Physical Science, Chemistry, AP Chemistry, Physics, AP Physics B, AP Physics C -Electricity and Magnetism, AP Physics C – Mechanics, Polymer Science II, and Robotics/Engineering II. IB-DP Physics I, IB-DP Physics II, MYP Chemistry, and IB-DP Chemistry may be accepted as allowable lab-based physical science courses for students enrolled in the IB program. MYP Biology and IB-DP Biology I may be accepted in lieu of the Biology I requirement for students enrolled in an IB program. Effective with school year 2013-14, up to two (2) of the three (3) required science units (excluding Biology I) may be earned by completing Agriculture and Natural Resources I & II. One (1) credit allowed shall be awarded for Biology II, and one-half (½) credit shall be awarded for Botany, and one-half (½) credit shall be awarded for Field Experiences in Science. Effective with eighth graders of school year 2013-14, Introduction to Agriscience may be taken in the eighth grade for Carnegie unit credit.

<sup>4</sup>Based on the 2011 Mississippi Social Studies Framework, A.P. World History can be accepted in lieu of the required World History from the Age of Enlightenment to Present course. A.P. United States History can be accepted in lieu of the required U.S. History from Post-reconstruction to Present course. A.P. Government and Politics: United States can be accepted in lieu of the required United States Government course. IB-DP History of the Americas I is accepted in lieu of the required U.S. History course for students enrolled in the IB program. IB-DP History of the Americas II is accepted in lieu of the required Mississippi Studies, Economics, and/or U.S. Government courses for students enrolled in the IB program. MYP U.S. Government is accepted in lieu of the required Government course for students enrolled in the IB program.

<sup>5</sup>The credit earned for a State/Local Government course in any other state by an out-of-state transfer student who enters after the sophomore year can stand in lieu of Mississippi Studies or Mississippi State and Local Government. If the transfer student took a State/Local Government course in a grade level that did not award Carnegie unit credit, then any other one-half (½) unit social studies course may be accepted. An out-of-state student who transfers after the junior year may substitute any other one-half (½) unit social studies course. Effective with eighth graders of school year 2013-14, Mississippi Studies and Geography may be taken in the eighth grade for Carnegie unit credit.

<sup>6</sup>Credit earned in Healthcare & Clinical Services I/Health Science I may be accepted in lieu of Contemporary Health to meet the graduation requirement for one-half (½) Carnegie unit in Health.

<sup>7</sup>Successful completion of JROTC I and JROTC II may be accepted in lieu of Contemporary Health to meet the graduation requirement for one-half (½) Carnegie unit in Health beginning in the 2010-2011 school year and thereafter, when instruction includes all health components in the JROTC curriculum.

<sup>8</sup>Evidence of proficiency in Keyboarding and Computer Applications is accepted in lieu of the required courses if the student earns one (1) unit in any of the courses listed in the *Business and Technology Framework* (academic and vocational). Information & Computer Technology (ICT) II may be accepted in lieu of Computer Discovery. A Carnegie unit earned for Science, Technology, Engineering, & Mathematics (STEM) in the 8<sup>th</sup> or 9<sup>th</sup> grade meets this graduation requirement. Technology Foundations replaces Computer Discovery, Keyboarding and Computer Applications and meets this graduation requirement when taken in grades 8-12. MYP Computer Discovery may be accepted in lieu of Computer Discovery for students enrolled in an IB program.

<sup>9</sup>Elective units in physical education include participation in interscholastic athletic activities, band, performance choral, dance and JROTC that meet the instructional requirements specified in the *Fitness through Physical Education Framework* and that are sanctioned by the Mississippi High School Activities Association.

<sup>10</sup>Comprehensive Health or Family and Individual Health meet this requirement if taken prior to the 2014-2015 school year.

<sup>11</sup>Computer Discovery meets this requirement if taken prior to the 2012-2013 school year. Beginning school year 2016-2017 a student may earn one (1) unit in Computer Science or Technology to meet graduation requirements.

#### **APPENDIX A-2**

#### GRADUATION REQUIREMENTS STANDARD 14

SENIORS OF SCHOOL YEAR 2011-2012 (and thereafter) (Entering ninth graders in 2008-2009 and thereafter)

Each student graduating from a secondary school in an accredited school district will have earned the required Carnegie units as specified in the following table. Contents of each required and elective course must include the core objectives identified in the *Mississippi Curriculum Frameworks*. Course titles and identification numbers must appear in the current edition of the *Approved Courses for Secondary Schools of Mississippi*. (See 7 Miss. Admin. Code Pt. 3, Ch. 28, R. 28.2, R. 28.3.) Enrollment in online and correspondence courses listed in this book must have prior approval granted by the principal. No more than one (1) of the minimum required number of units may be earned through completion of an approved correspondence course.

Any student who completes the minimum graduation requirements as specified below and has achieved a passing score on each of the required high school exit examinations is eligible to receive a high school diploma. The local school district may establish additional local requirements approved by the local school board as authorized under MS Code § 37-16-7.

Beginning school year 2008-2009 and thereafter, all entering ninth graders (seniors of school year 2011-2012 and later) will be required to have a minimum of 24 Carnegie units as specified below, unless their parent/guardian requests to opt the student out of Appendix A-2 requirements in accordance with local school board policy. Any student who is taken out of these requirements of Appendix A-2 will be required to complete the graduation requirements as specified in Appendix A-1 (District Option). The local school district may establish additional local requirements approved by the local school board as authorized under MS Code § 37-16-7.

CURRICULUM AREA	CARNEGIE UNITS	REQUIRED SUBJECTS	
ENGLISH	41	English I	
		English II	
MATHEMATICS	<b>4</b> <sup>2</sup>	Algebra I or Integrated Math I	
SCIENCE	<b>4</b> <sup>3</sup>	Biology I	
SOCIAL STUDIES	4	1 World History <sup>4</sup>	
		1 U.S. History⁴	
	9	⅓ Geography⁴	
		½ U.S. Government	
		½ Economics <sup>5</sup>	
		½ Mississippi Studies <sup>4</sup>	
<b>HEALTH and PHYSICAL EDUCATION</b>	1 <sup>7&amp;8</sup>	½ Contemporary Health and	
		½ Physical Education <sup>9&amp;11</sup>	
<b>BUSINESS and TECHNOLOGY</b>	1 <sup>10</sup>	1 Information and Communication Technology (ICT)	
TECHNOLOGY OR COMPUTER		II or 1 Science, Technology, Engineering &	
SCIENCE		Mathematics (STEM) or 1 Technology Foundations	
		or ½ Keyboarding and ½ Computer Applications or	
		Keystone or Computer Science <sup>10</sup>	
THE ARTS	1	Any approved 500.000 course	
ELECTIVES	5 <sup>11</sup>		
TOTAL UNITS REQUIRED	24		

APPENDIX A-2 (Continued)

# GRADUATION REQUIREMENTS STANDARD 14 SENIORS OF SCHOOL YEAR 2011-2012

(Entering ninth graders in 2008-2009 and thereafter)

<sup>1</sup>Compensatory English, Compensatory Reading, and Compensatory Writing may not be included in the four (4) English courses required for graduation; however, these courses may be included in the five (5) general electives required for graduation. Beginning school year 2014-2015, Compensatory English may only be taken if a credit-bearing English course is taken in the same school year. Accelerated English 9 can be accepted in lieu of English I. Accelerated English 10 and AP English Language Composition can be accepted in lieu of English II. Beginning school year 2010-2011 for all entering ninth graders, English I is a required prerequisite course for English II. English I may not be taken after a student completes English II.

<sup>2</sup>Compensatory Mathematics, Introduction to Engineering, and any developmental mathematics course may not be included in the four (4) mathematics courses required for graduation; however, these courses may be included in the five (5) general electives required for graduation. Beginning school year 2014-2015, Compensatory Mathematics may only be taken if a credit-bearing Math course is taken in the same school year. Math 8 cannot be taken after Algebra I or Integrated Math I. Beginning school year 2007-2008 for all entering eighth graders, at least two (2) of the four (4) required mathematics courses must be higher than Algebra I or Integrated Math I. Effective with ninth graders of 2010-2011, Survey of Mathematical Topics may not be included in the two (2) math courses higher than Algebra I. The allowable mathematics courses that can be taken which are higher than Algebra I or Integrated Math I are: Geometry, Integrated Math II, Algebra II, Integrated Math III, CCSS Advanced Math Plus, Algebra III, SREB Math Ready, Calculus, AP Calculus AB, AP Calculus BC, and AP Statistics. Advanced Algebra, Trigonometry, Pre-Calculus, Discrete Mathematics, and Statistics meet this requirement if taken prior to the 2015-2016 school year. MYP Geometry, MYP Algebra II, IB-DP Mathematics I, IB-DP Mathematics II, IB-DP Mathematical Studies I, and IB-DP Mathematical Studies II are allowable mathematics courses higher than Algebra I for IB students. One (1) of the four (4) required mathematics units may be in Architecture & Drafting if the student completes the two-course sequence for Architecture & Drafting I & II. One (1) of the four (4) required mathematics units may be in Survey of Mathematical Topics; however, this course does not meet the mathematics requirement for admission to institutions of higher learning. Effective with the eighth graders of 2004-2005, Pre-Algebra, Transition to Algebra, and Algebra I may be taken in the eighth grade for Carnegie unit credit. Pre-Algebra, Transition to Algebra, and Survey of Mathematical Topics are no longer available after the 2013-2014 school year. Carnegie units may be earned by seventh and eighth graders effective with school year 2014-2015 for the following courses: CCSS Compacted Math Grade 7, CCSS Math Grade 8, CCSS Compacted Math Grade 8 (with Integrated Math I), and CCSS Math Grade 8(with Algebra I/Traditional). Effective with the eighth graders of 2008-2009, Geometry may be taken in the eighth grade for Carnegie unit credit. Effective with 7th graders of 2012-13, Pre-Algebra, Algebra I, Biology I, ICT II (Information & Communication Technology), and first-year Foreign Language may be taken in the 7<sup>th</sup> grade for Carnegie unit credit provided the course content is the same as the high school course. Effective with 8th graders of 2012-2013, STEM (Science, Technology, Engineering, & Mathematics) and second-year Foreign Language may be taken in the 8th grade for Carnegie unit credit provided the course content is the same as the high school course. Effective with 8th graders of 2013-2014, Introduction to Agriscience may be taken for Carnegie unit credit provided the course content is the same as the high school course.

<sup>3</sup>One (1) unit may be in Concepts of Agriscience or Introduction to Agriscience, and a second unit may be earned by completing two (2) of the following three (3) courses: Science of Agriculture Plants, Science of Agriculture Animals, and Science of Agricultural Environment. Two (2) units may be in the following courses if the student completes the required course sequence ending with Healthcare & Clinical Services II, Aquaculture II, Forestry II, Robotics/Engineering II, Polymer Science II or Careers in Polymer Science, Horticulture II or Horticulture Landscape

and Turf grass, Engineering II or Applied Engineering Concepts, Health Sciences II or Workplace and Employment Skills in Health Sciences. Beginning school year 2008-2009 for all entering eighth graders, one (1) unit must be a lab-based physical science. The allowable lab-based physical science courses are Physical Science, Chemistry, AP Chemistry, Physics, AP Physics B, AP Physics C – Electricity and Magnetism, AP Physics C – Mechanics, Polymer Science II, and Robotics/Engineering II. IB-DP Physics I, IB-DP Physics II, MYP Chemistry, and IB-DP Chemistry may be accepted as allowable lab-based physical science courses for students enrolled in the IB program. MYP Biology and IB-DP Biology I may be accepted in lieu of the Biology I requirement for students enrolled in an IB program. Effective with school year 2013-14, up to two (2) of the four (4) required science units (excluding Biology I) may be earned by completing Agriculture and Natural Resources I & II. One (1) credit allowed shall be awarded for Biology II, one-half (½) credit shall be awarded for Botany, and one-half (½) credit shall be awarded for Field Experiences in Science. Effective with eighth graders of school year 2013-14, Introduction to Agriscience may be taken in the eighth grade for Carnegie unit credit.

<sup>4</sup>Based on the 2011 Mississippi Social Studies Framework, A.P. World History can be accepted in lieu of the required World History from the Age of Enlightenment to Present course. A.P. United States History can be accepted in lieu of the required U.S. History from Post-reconstruction to Present course. A.P. Government and Politics: United States can be accepted in lieu of the required United States Government course. A.P. Macroeconomics or A.P. Microeconomics can be taken in lieu of the required Economics course. A.P. Human Geography can be accepted in lieu of the required Geography course for students enrolled in the IB program. IB-DP History of the Americas I is accepted in lieu of the required U.S. History course for students enrolled in the IB program. IB-DP History of the Americas II is accepted in lieu of the required Mississippi Studies, Economics, and/or U.S. Government courses for students enrolled in the IB program. MYP U.S. Government is accepted in lieu of the required Government course for students enrolled in the IB program. Effective with eighth graders of school year 2013-14, Mississippi Studies and Geography may be taken in the eighth grade for Carnegie unit credit.

<sup>5</sup>Credit earned for Business Fundamentals or Business Fundamentals II may be accepted in lieu of one-half (½) unit in Economics.

<sup>6</sup>The credit earned for a State/Local Government course in any other state by an out-of-state transfer student who enters after the sophomore year can stand in lieu of Mississippi Studies or Mississippi State and Local Government. If the transfer student took a State/Local Government course in a grade level that did not award Carnegie unit credit, then any other one-half (½) unit social studies course may be accepted. An out-of-state student who transfers after the junior year may substitute any other one-half (½) unit social studies course.

<sup>7</sup>Credit earned in Healthcare & Clinical Services I, Health Sciences I, or Theory and Application of Health Sciences I may be accepted in lieu of Contemporary Health to meet the graduation requirement for one-half (½) Carnegie unit in Health.

<sup>8</sup>Successful completion of JROTC I and JROTC II may be accepted in lieu of Contemporary Health to meet the graduation requirement for one-half (½) Carnegie unit in Health beginning in the 2010-2011 school year and thereafter.

<sup>9</sup>Comprehensive Health or Family and Individual Health meet the health requirement if taken prior to the 2014-2015 school year. The graduation requirement for one-half (½) unit in physical education may include participation in interscholastic athletic activities, band, dance and JROTC that meet the instructional requirements specified in the *Fitness through Physical Education Framework* and that are sanctioned by the Mississippi High School Activities Association.

<sup>10</sup>Evidence of proficiency in technology is accepted in lieu of the required courses if the student earns one (1) unit in a technology-rich academic or career technical course related to their program of study. Effective with school year

2012-2013, a Carnegie unit credit for ICT II (Information & Communication Technology) may be awarded to 7<sup>th</sup> grade students. Effective with school year 2012-2013, a Carnegie unit credit for STEM (Science, Technology, Engineering, & Mathematics) may be awarded to 8<sup>th</sup> grade students. ICT II or Keystone may be accepted in lieu of Computer Discovery. A Carnegie unit earned for STEM in the 8<sup>th</sup> or 9<sup>th</sup> grade meets this graduation requirement. Technology Foundations replaces Computer Discovery, Keyboarding, and Computer Applications, and meets this graduation requirement when taken in grades 8-12. MYP Computer Discovery may be accepted in lieu of Computer Discovery for students enrolled in an IB program. Computer Discovery meets this requirement if taken prior to the 2012-2013 school year. Beginning school year 2016-2017 a student may earn one (1) unit in Computer Science or Technology to meet graduation requirements.

<sup>11</sup>Only one (1) elective unit in physical education including participation in interscholastic athletic activities, band, performance choral, dance or JROTC that meet the instructional requirements specified in the *Fitness through Physical Education Framework* and that are sanctioned by the Mississippi High School Activities Association may be applied each year to the minimum 24 required state units. If a local district has graduation requirements above the state requirements, they may award additional credits as outlined in the local Board policy.

#### **APPENDIX A-3**

### GRADUATION REQUIREMENTS STANDARD 14

### CAREER PATHWAY OPTION SENIORS OF SCHOOL YEAR 2011-2012(and thereafter) (Entering eleventh graders in 2010-2011 and thereafter)

In 2010, Mississippi state policymakers passed legislation to create multiple pathways to a standard diploma. The 2010 legislative actions created a career pathway to a standard diploma, with the goal of improving Mississippi graduation rates and providing students with career and technical training that prepares students for postsecondary credential or certification programs and employable workplace skills. This legislative change created Section § 37-16-17, Mississippi Code of 1972, as amended, to provide for high school career option programs and career track curricula for students not wishing to pursue a baccalaureate degree.

Enrollment in online and correspondence courses listed in this book must have prior approval granted by the principal. No more than one (1) of the minimum required number of units may be earned through completion of an approved correspondence course.

CURRICULUM AREA	CARNEGIE UNITS	REQUIRED SUBJECTS	
ENGLISH	41	English I English II	
MATHEMATICS	32	Algebra I or Integrated Math I	
SCIENCE	33	Biology I	
SOCIAL STUDIES	34,5	1 U.S. History ½ U.S. Government ½ Mississippi Studies	
HEALTH or PHYSICAL EDUCATION	1∕26	½ Contemporary Health or ½ Physical Education <sup>10</sup>	
CAREER and TECHNICAL	47	(Selected from Student's Program of Study)	
BUSINESS and TECHNOLOGY TECHNOLOGY OR COMPUTER SCIENCE	18	Technology Foundations, Information and Communication Technology (ICT) II, Science, Technology, Engineering, and Mathematics (STEM), or Computer Applications and Keyboarding, Keystone or Computer Science	
ELECTIVES	21/29	Courses selected from the student's approved program of study	
TOTAL UNITS REQUIRED	21		

**NOTE**: Mississippi's Institutions of Higher Learning requirements differ from minimum graduation requirements for this diploma pathway.

APPENDIX A-3 (Continued)

# GRADUATION REQUIREMENTS STANDARD 14 CAREER PATHWAY OPTION

SENIORS OF SCHOOL YEAR 2011-2012 (and thereafter) (Entering eleventh graders 2010-2011 and thereafter)

<sup>1</sup>Compensatory English, Compensatory Reading, and Compensatory Writing shall not be included in the four (4) English courses required for graduation. Beginning school year 2014-2015, Compensatory English may only be taken if a credit-bearing English course is taken in the same school year. The two (2) additional English credits must be from the student's program of study which includes Technical Writing, Creative Writing, English III, English IV, or any college-level dual credit courses.

<sup>2</sup>Compensatory Mathematics may not be included in the three (3) mathematics courses required for graduation. Beginning school year 2014-2015, Compensatory Mathematics may only be taken if a creditbearing Math course is taken in the same school year. Math 8 cannot be taken after Algebra I or Integrated Math I. For students pursuing the Career Pathway Graduation Option, at least one (1) of the required mathematics courses must be above Algebra I or Integrated Math I and selected from the student's program of study. The allowable mathematics courses that can be taken which are higher than Algebra I or Integrated Math I are: Geometry, Integrated Math II, Algebra II, Integrated Math III, CCSS Advanced Math Plus, Algebra III, SREB Math Ready, Calculus, AP Calculus AB, AP Calculus BC, and AP Statistics, or any college-level dual credit courses. Survey of Mathematical Topics, Advanced Algebra, Trigonometry, Pre-Calculus, Discrete Mathematics, and Statistics meet this requirement if taken prior to the 2015-2016 school year. Effective with the eighth graders of 2004-2005, Pre-Algebra, Transition to Algebra, and Algebra I may be taken in the eighth grade for Carnegie unit credit. Effective with the eighth graders of 2008-2009, Geometry may be taken in the eighth grade for Carnegie unit credit. Pre-Algebra and Transition to Algebra are no longer available after the 2013-2014 school year. Carnegie units may be earned by seventh and eighth graders effective with school year 2014-2015 for the following courses: CCSS Compacted Math Grade 7, CCSS Math Grade 8, CCSS Compacted Math Grade 8(with Integrated Math I), and CCSS Math Grade 8(with Algebra I/Traditional).

<sup>3</sup>For students pursuing the Career Pathway Graduation Option, at least one (1) of the required science courses must be above Biology I and selected from the student's program of study. If a student's program of study allows, one (1) unit may be in Concepts of Agriscience (AEST). A second science unit may be earned by completing a two-course sequence selected from the following options: Science of Agricultural Animals, Science of Agricultural Plants, or Science of Agricultural Environment. Two (2) units may be in the following courses if the student completes the two-course sequence: Healthcare & Clinical Services I & II, Health Science I & II; Aquaculture I & II; Forestry I & II; Horticulture I & II; Polymer Science I & II; and Engineering I & II. Effective with school year 2013-14, up to two (2) of the three (3) required science units (excluding Biology I) may be earned by completing Agriculture and Natural Resources I & II. One (1) credit allowed shall be awarded for Biology II, and one-half (½) credit shall be awarded for Botany, and one-half (½) credit shall be awarded for Field Experiences in Science. Effective with eighth graders of school year 2013-14, Introduction to Agriscience may be taken in the eighth grade for Carnegie unit credit.

<sup>4</sup>AP U.S. History is accepted in lieu of the required U.S. History Post-reconstruction to Present. The third social studies credit should be selected based on the student's program of study.

<sup>5</sup>The credit earned for a State/Local Government course in any other state by an out-of-state transfer student who enters after the sophomore year can stand in lieu of Mississippi Studies or Mississippi State and Local Government. If the transfer student took a State/Local Government course in a grade level that did not award

Carnegie unit credit, then any other one-half (½) unit social studies course may be accepted. An out-of-state student who transfers after the junior year may substitute any other one-half (½) unit social studies course. Credit earned for Business Fundamentals or Business Fundamentals II may be accepted in lieu of one-half (½) unit in Economics. Effective with eighth graders of school year 2013-14, Mississippi Studies, Geography and Introduction to Agriscience may be taken in the eighth grade for Carnegie unit credit.

<sup>6</sup>Credit earned in Healthcare & Clinical Services I/Health Science I may be accepted in lieu of Contemporary Health to meet the graduation requirement for one-half (½) Carnegie unit in Health. Interscholastic athletic activities, band, and ROTC, if they meet the instructional requirements specified in the *Fitness through Physical Education Framework*, may also be accepted.

<sup>7</sup>Career and Technical Education (CTE) courses must be based on the student's program of study and should include dual credit/dual enrollment options as found in Section 37-15-38 of the *Mississippi Code of 1972*.

<sup>8</sup>Evidence of proficiency in technology is accepted in lieu of the required courses if the student earns one (1) unit in a technology-rich academic or career technical course related to their program of study or earns one (1) unit of Computer Science.

<sup>9</sup>Electives must be selected from courses related to the student's program of study. Credits earned not approved for that student's program of study will not be counted toward graduation requirements.

<sup>10</sup>Comprehensive Health or Family and Individual Health meet the health requirement if taken prior to the 2014-2015 school year.

#### **APPENDIX A-4**

#### GRADUATION REQUIREMENTS STANDARD 14

# MISSISSIPPI EARLY EXIT DIPLOMA SENIORS OF SCHOOL YEAR 2013-2014 (and thereafter) (Entering ninth graders in 2011-2012 and thereafter)

Qualification for a Mississippi Early Exit Diploma signifies to students that they are ready to do college-level work without remediation and opens up a variety of education and career pathways within and beyond high school.

In order to qualify for a Mississippi Early Exit Diploma, in addition to earning the Carnegie units listed below, students must meet college and career qualification scores in all core content areas on a series of end-of-course exams and/or the required benchmarks for college readiness on the ACT (18 in English Composition; 22 in Mathematics; 22 in Reading; 23 in Science) or Institutions of Higher Learning (IHL) approved college entrance exam.

Enrollment in online and correspondence courses listed in this book must have prior approval granted by the principal. No more than one (1) of the minimum required number of units may be earned through completion of an approved correspondence course.

CURRICULUM AREA	CARNEGIE UNITS	REQUIRED SUBJECTS	
ENGLISH	2	English II (equivalent Course)	
MATHEMATICS	3	Algebra I (Equivalent Course)	
SCIENCE	2	Biology I (Equivalent Course)	
SOCIAL STUDIES	2½	1 World History 1 U.S. History (Equivalent Courses) ½ Mississippi Studies	
HEALTH and PHYSICAL EDUCATION	1	Any combination of Health and Physical Education	
TECHNOLOGY OR COMPUTER SCIENCE	1	Technology Foundations; Information and Communication Technology (ICT) II; or Science, Technology, Engineering, and Mathematics (STEM), Keystone or Computer Science.	
THE ARTS	1	Any approved 500.000 course	
ELECTIVES	5	(Should focus on college admission or national certification requirements)	
TOTAL UNITS REQUIRED	17½		

### **Equivalency Chart for Innovative Programs**

### Authorized by the State Board of Education

### **Equivalency Curriculum Chart for MS Tested Areas**

MS	Cambridge	Innovative High School	Quality Core ACT
Curriculum			
Algebra I or	Cambridge IGCSE	Integrated Mathematics I	ACT Quality Core
Integrated	Mathematics I		Algebra I
Math I	Or		
	Cambridge IGSE Extended		
	Sequence		
Biology I	Coordinated Science I	Integrated Science II	ACT Quality Core
	Or		Biology I
	Cambridge IGCSE Biology		
English II	Cambridge IGCSE English	Integrated English	ACT Quality Core English
	Language	Language II	II
US History	Cambridge IGCSE	Integrated History II	ACT Quality Core
	American History		American History

### **Equivalency Test Chart for MS Tested Areas**

MS Curriculum	Cambridge	Innovative High School	Quality Core ACT
Algebra I	Cambridge Mathematics	PLAN or ACT	ACT Quality Core
	End of Sequence Test		Algebra I EOC Test
Biology I	Coordinated Science I or	PLAN or ACT	ACT Quality Core
	Cambridge IGCSE Biology		Biology I EOC Test
	End of Course (EOC) Test		
English II	Cambridge IGCSE English	PLAN or ACT	ACT Quality Core English
	Language EOC Test		II EOC Test
US History	Cambridge IGCSE	PLAN or ACT	ACT Quality Core
	American History EOC Test		American History EOC
			Test