Recommendations to the State Board of Education from the State Superintendent

on

Michigan High School Graduation Requirements

November 15, 2005

Recommendations from the State Superintendent of Public Instruction to the State Board of Education

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Summary of Recommendations for Students

Student Graduation Requirements

I recommend that Michigan establish the following high school graduation requirements:

- Participation in the Michigan Merit Examination or MI-Access in the spring of the junior year.
- Completion of a **Michigan Merit Curriculum** that includes a **Michigan Merit Core** and a **21st Century Applied Learning Core.**
- Completion of an online credit or noncredit course or learning experience.

Implementation of the Michigan Merit Curriculum Requirements

- Requirements beginning with the freshman class of 2006-07 (the graduating class of 2010). (If legislation to support this requirement has not been signed into law by March 1, 2006, the requirement will begin with the freshman class of 2007-08.)
- District requirement to file a phase-in plan if unable to implement immediately.
- Student modification allowed after three years in Michigan Merit Curriculum.

Michael P. Flanagan
State Superintendent of Public Instruction

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Michigan Merit Core

The **Merit Core** content standards may be met in a traditional course sequence or in different contexts or formats such as a Humanities course sequence, Career and Technical Education programs, or a specialized small school curriculum, or as an online course. Schools that offer courses in a different format must be prepared to demonstrate how these courses align with the **Merit Core** content standards and demonstrate how the content standards will be assessed.

English Language Arts	4 Credits Credits to Include: ■ English 9 {or Humanities sequence, or CTE sequence ■ English 10 ■ English 11 ■ English 12 These courses will include writing, speaking, reading, listening, viewing, representing, literature, culture and language.
Mathematics	4 Credits Credits to Include: ■ Algebra I {or Integrated Math sequence, or CTE sequence ■ Geometry ■ Algebra II ■ 1 Additional Math or Math-Related class *Some Examples*: Calculus, Trigonometry, Electronics, Accounting, Probability and Statistics ***Math must be taken in the Senior year.***
Science	3 Credits Credits to Include: ■ Biology {or Integrated Science sequence, or CTE sequence + ■ Physics or Chemistry + ■ 1 year of Additional Science *Some Examples*: Earth Science, Environmental Science, Forensic Science, Microbiology, Nanoscience, Oceanography, AP/IB/College-for-Credit Sciences, Health Sciences, Agriscience, Chemistry, Physics
Social Studies	3 Credits Credits to Include: ■ Government/Civics .5 (semester) {or Humanities sequence, or CTE sequence ■ Economics .5 (semester) ■ US History (including Geography) ■ World History (including Geography)
Physical Education/Health	1 Credit *Some Examples*: Phys Ed., Personal Fitness/Aerobics, Weight Training, Team Sports, Health and Nutrition
Fine Arts/Music	*1 Credit* *Some Examples: Vocal and Instrumental Music, Art, Music Appreciation, Art History, Multicultural Art, Readers' Theater*
TOTAL	**16 Credits**

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21st Century Applied Learning Core

All remaining elective credits must include teaching and learning of 21st century skills, examples shown below.

The following set of skill categories represent the 21st century skills that all students need to know and apply for successful living in the 21st century. These skills permeate the **Merit Academic Core** and are enhanced by courses in the elective areas. The course content standards must incorporate one or more of the following categories. Assessments in the 21st Century Applied Learning Core often involve demonstration of satisfactory performance by applying the course content standards to real-world tasks and projects, and contexts.
**adapted from the Partnership for 21st Century Skills*
http://www.21stcenturyskills.org/index.php

21st Century Skill: Global Literacy	Course Examples
▪ Understand and address global issues. ▪ Learn from and work with others from diverse cultures, religions, and lifestyles. ▪ Master non-English language skills as a tool for understanding other nations and cultures.	Fine Arts Music and Performing Arts World Languages: including world languages Chinese, Japanese, Arabic, Swahili, Hindi, Sign language, in addition to Spanish, French, German, etc. Global Studies Multicultural Studies: including, African American Studies, Native American Studies, Latino Studies, Asian Studies World Religions Philosophy Anthropology Sociology/Psychology International Business MVHS Online Classes Advanced Placement Courses JROTC
21st Century Skill: Civic Literacy ▪ Participate effectively in government as an informed citizen ▪ Exercise the rights and obligations of citizenship at local, state, national and global levels. ▪ Understand the local and global implications of civic decisions. ▪ Apply 21st century skills to make intelligent choices as a citizen.	**Course Examples** Student Government Leadership Law Service Learning Legislative Internship Business Ethics MVHS Online Classes Advanced Placement Courses
21st Century Skill: Financial, Economic, and Entrepreneurial Literacy ▪ Make appropriate personal economic choices. ▪ Understand the role of the economy and the role of business in the economy. ▪ Apply appropriate 21st century skills to function as a productive contributor within an organizational setting. ▪ Integrate oneself within and adapting continually to our nation's evolving economic and business environment.	**Course Examples** Business Technology Entrepreneurship, Accounting, Marketing Global Economics Junior Achievement Applied Economics Internships Life Science –Personal Living Financial Management Business Management

21st Century Skill: Information and Communications Technology Literacy	Course Examples
▪ Using information and media literacy skills. ▪ Analyzing, accessing, managing, integrating, evaluating and creating information in a variety of forms and media. ▪ Understanding the role of media in society. ▪ Understanding, managing and creating effective oral, written and multimedia communication in a variety of forms and contexts. ▪ Demonstrating interpersonal and self-direction skills. Becoming more productive in accomplishing tasks and developing interest in improving own skills.	Multimedia, Broadcasting, CISCO, Computer Science Debate and Forensics Oral Communication Journalism—Publications Creative Writing Drama Theater Arts Film and Photography Desktop Publishing Advertising Graphic Arts and Design Fine Arts Performing Arts—Dance, Orchestra, Marching Band, Music Technology MVHS Online Classes
21st Century Learning Skills ▪ **Thinking and Problem-Solving**—Critical thinking, systems thinking, exercising sound reasoning, making complex decisions, problem identification, formulation and solution. ▪ **Interpersonal and Self-Directional**-Teamwork and leadership; adapting to varied roles and responsibilities; working productively with others; exercising empathy; respecting diverse perspectives. ▪ **Information and Communication-** Creativity and intellectual curiosity, information and media skills, communications skills, self direction.	**Course Examples** Electronics, Aviation, Building and Construction Trades Robotics Internships Work Based Learning Experiences Probability and Statistics Health Sciences Personal Fitness and Wellness
Accelerated Learning ▪ Acknowledges that students learn at different rates ▪ Can occur at any time in a student's high school experience ▪ Can assist students in moving beyond grade level, remaining at grade level, or moving to grade level.	**Course Examples** Advanced Placement Courses Dual Enrollment Courses Online courses Literacy Labs Math Labs Gear Up Upward Bound Ramp Up Courses Mentor Reading 2 + 2 + 2 Articulated Programs
21st Century Applied Learning Core	**Total credits for graduation determined by district**

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Sample Student Schedules

Career and Technical Education Focus

	Grade 9	Grade 10	Grade 11	Grade 12
Period 1	English 9	English 10	English 11	English 12
Period 2	Biology	US History	Algebra II	Math-Related
Period 3	World History	Chemistry	Gov/Econ	Science
Period 4	Health/PE	Geometry	CTE	CTE
Period 5	Algebra I	Fine Arts/Music		
Period 6	Elective/Elective	Elective/Elective		

Music Interest & World Language Focus

	Grade 9	Grade 10	Grade 11	Grade 12
Period 1	English 9	English 10	English 11	English 12
Period 2	Biology	US History	Algebra II	Math-Related
Period 3	World History	Chemistry	Gov/Econ	Science
Period 4	Health/PE	Geometry	World Language	Elective/Elective
Period 5	Algebra I	World Language	Fine Arts/Music	Elective/Elective
Period 6	Band	Band	Band	Band

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