#### TITLE 133 PROCEDURAL RULE WEST VIRGINIA HIGHER EDUCATION POLICY COMMISSION

# SERIES 24 PREPARATION OF STUDENTS FOR COLLEGE

#### SECTION 1. GENERAL

- 1.1 Scope This rule sets forth minimum levels of knowledge, skill and competency a student needs to possess to be prepared for college and establishes processes for communicating this information and procedures for assuring that teacher education programs prepare educators in getting K-12 students ready for college.
- 1.2 Authority W. Va. Code §18B-1-1e
- 1.3 Filing Date July 11, 2002
- 1.4 Effective Date August 10, 2002
- 1.5 Repeal of Former Rule: Repeals and replaces Series 51 of Title 128 and Title 131, dated August 31, 1997

#### SECTION 2. PURPOSE

- 2.1 The purpose of this rule is to implement the provisions of W. Va. Code §18B-1-1e which call for the West Virginia Higher Education Policy Commission to develop a rule on preparation of students for college. The goals are for public higher education to collaborate with public education to achieve the following:
  - 2.1.1 To assist students in the planning and preparation for success in college and other post-secondary education if their education major interests require such formal education after high school;
  - 2.1.2 To establish the minimum expected level of knowledge, skill and competency a student must possess to be prepared fully for college or other post-secondary education at state institutions of higher education;
  - 2.1.3 To implement a method for communicating the minimum level of knowledge, skill and competency to students, parents, educators and counselors in the public schools, and admission officers, advisers and faculty in the higher education institutions; and
  - 2.1.4 To assure that the teacher preparation programs in state institutions of higher education prepare educators to, at a minimum, deliver instruction necessary to prepare students fully for college and other post-secondary education or gainful employment.

## SECTION 3. ASSISTING STUDENTS IN PREPARING FOR COLLEGE

- 3.1 The state colleges and universities shall work collaboratively with schools to increase educational opportunities and standards for potential college students and to increase the number of students who complete the core curriculum. Among these efforts will be institutional initiatives to:
  - 3.1.1 Improve ACT/SAT scores of high school students;
  - 3.1.2 Increase the percentage of high school students going to college;
  - 3.1.3 Provide more opportunities for high school students to complete college courses while still in high school; and
  - 3.1.4 Increase retention of students after they enter college.
- 3.2 The state colleges and universities in collaboration with the K-12 schools shall conduct college awareness programs that reach students from the elementary grades through high school. These programs shall provide opportunities to visit the college, to meet faculty, and to learn the importance of motivation and achieving academic excellence. Students in the eighth grade should be encouraged to take the academic core courses during their high school years. It is important that the institutions work with school officials, counselors, parents and teachers to disseminate information effectively on preparing for success in college.

## SECTION 4. MINIMUM LEVELS OF KNOWLEDGE, SKILL AND COMPETENCY NEEDED FOR COLLEGE

4.1 Though levels of preparation, knowledge and skills needed for success in a particular academic program may vary, there are certain minimal knowledge and skill levels students should possess on entering a higher education institution. In order to attain these levels, students should be encouraged to take rigorous coursework in high school and to complete a preparatory curriculum.

While the specific levels of knowledge, skill and competency needed to be successful in post-secondary education may vary among types of institutions and within academic programs, mastery of the following essential skill areas and minimum levels of attainment should assure success in a community and technical college, baccalaureate institution or other initial post-secondary education setting.

4.2 Essential skill areas and minimum levels of attainment needed on entering college are:

4.2.1 English

A student will be able to:

- Demonstrate proficient use of English punctuation and spelling;

- Demonstrate proficiency in grammar and usage, including the ability to write complete, grammatical sentences with some variety in syntax; and

- Write an essay with a central idea or thesis, an introduction, body, and conclusion; paragraphs with topic sentences and supporting details; appropriate word choice; and clear flow of ideas from one part to another.

#### 4.2.2 Reading/Study Skills

Proficient reading skills are essential for success in every academic field, particularly humanities, social sciences, and natural sciences. Similarly, effective study skills are essential for all academic areas. A successful college student must be able to:

- Use word analysis to determine the meaning of unfamiliar words;
- Use context clues to determine the meaning of unfamiliar words;
- Read for the main idea;
- Read for information;
- Make inferences;
- Understand figurative language;
- Draw conclusions and predict outcomes;
- Recognize organizational patterns;
- Generalize;
- Evaluate ideas;
- Manage time effectively;
- Develop good notetaking and outlining skills for both in-class and out-of-class activities; and
- Develop good test-taking skills

#### 4.2.3 Mathematics

Algebra and geometry serve as gatekeepers to successful college work. Students who successfully complete algebra and geometry in high school are more likely to enter college and complete college than other students. An entering college student must be able to:

- Simplify numerical expressions and evaluate algebraic expressions;
- Represent problems and solve linear algebraic equations, systems of equations, and inequalities;

- Use the laws of exponents and simplify square roots;
- Factor polynomials by applying various methods;
- Graph linear equations by the slope-intercept, point-slope, and x and y intercept methods;
- Add, subtract, multiply, and divide rational expressions;
- Solve quadratic equations with real roots by factoring, completing the square, and using the quadratic formula;
- Apply the Pythagorean Theorem in solving practical problems and in deriving the special right angle ratios;
- Develop basic concepts of analytical geometry such as formulas for distance, slope, and midpoint;
- Collect, organize, and interpret data using graphs, charts, and tables; and
- Demonstrate the ability to use logarithms.

## 4.2.4 Communication

Good skills in communication are important for success in college. A student must be able to:

- Demonstrate a knowledge and understanding of the fundamentals of effective communication;
- Demonstrate the ability to identify and use effective strategies for formal and informal speaking situations in public, group, work and personal settings;
- Demonstrate the ability to identify and use different listening skills appropriate for diverse types and purposes of listening;
- Demonstrate the ability to identify and use communication strategies to enhance relationships and resolve conflicts.

# 4.2.5 Critical thinking, analysis, reasoning

It is important that a beginning college student possess the ability to analyze, reason and think critically. These complex skills are essential to all academic areas, but are particularly crucial to success in the natural sciences and social studies. A student must have at least minimal skills to:

- Understand and interpret data;
- Evaluate conflicting viewpoints;

- Demonstrate creative thinking and problem solving;
- Solve problems rationally; and
- Demonstrate "common sense"

## 4.2.6 Science

Proficiency in science incorporates mathematics and social issues into the learning of basic scientific concepts. Students must be able to:

- Identify a problem, recognize relevant/necessary information for problem solving and inductively form a theory;
- Develop a hypothesis to test a given theory;
- Conduct a scientific inquiry and produce a written or oral report;
- Solve problems which integrate science and mathematics with technology;
- Apply scientific methods and knowledge to individual and social issues;
- Recognize the diversity and unity of our natural world;
- Recognize the basic components of matter, cells, and tissue;
- Recognize levels of organization for living and non-living systems.

# 4.2.7 Fine and Performing Arts

Recognizing the importance of the fine and performing arts is essential to the well-being of a society. Students should receive exposure in the fine and performing arts in the beginning stages of their education. This significant aspect of life should not be left to chance. Specifically, students must be provided opportunities to:

- Observe the fine and performing arts, namely art, music, theater, and dance;
- Actively participate in activities in the fine and performing arts.

# 4.2.8 Humanities

The basic humanities explore the worlds of language, literature, classics, philosophy and/or religious studies. Specifically, students must:

- Have the opportunity to participate in the humanities including the study of foreign languages, world literature, the classics, philosophy

and/or religious studies;

- Recognize how symbolic texts are valued and revalued over time as each generation examines them anew from its own current perspective;
- Recognize the ways in which cultural values define what an individual experiences as "reality," influence the channels available for human expression, and affect the perception of an interaction among all areas of experience.
- 4.2.9 Social Studies

The mastery of basic skills and understanding in the social studies is essential. A student must be able to:

- Gather, classify, interpret, analyze, summarize, synthesize, and evaluate the accuracy of information, i.e., credibility, validity; reliability; comprehensiveness; bias; accuracy; frame of reference; and currency;
- Interpret, critique, and design graphs, tables, timelines, pictures, maps, and cartoons;
- Demonstrate knowledge of the contributions of key men and women and the impact of major historical events;
- Demonstrate knowledge of the development of the United States Constitution, its importance, and the adaptability and applications of its principles in maintaining the political institutions that ensure the liberty and equality of United States citizens.
- 4.2.10 Technological literacy

The ability to use computers and other forms of telecommunication technology is no longer a luxury. It is a necessity. A student must be able to:

- Keyboard effectively;
- Use computers for word processing and other academic tasks;
- Use technology to communicate and to be an active participant in the information age; and
- Demonstrate the ability to identify and use skills necessary for competent participation in communication across various types of electronic audio and visual media.

It is vital that a beginning college student exhibit good citizenship behavior. While what constitutes good citizenship may be somewhat nebulous, it is clear that a basic understanding of the rights and responsibilities of living in a democratic society is an important part of the educational process. A successful student must be able to:

- Demonstrate an appreciation of democratic values and responsible participation in governing processes;
- Learn to work with others;
- Understand and appreciate diversities among people, groups, and nations; and
- Learn to be respectful of personal dignity.

## 4.3 Core Curriculum

There is strong evidence that students who complete a rigorous core curriculum in high school perform better in college than those who do not. Beginning with the seminal study on educational attainment of school and college student, *A Nation at Risk*, published in 1983 by the National Commission on Excellence in Education, numerous studies attest to the importance of students completing a rigorous high school curriculum as an essential condition to assure success in college. *A Nation at Risk* stated that all high school students should complete a core including at least four units of English, three units of mathematics, three units of social studies and three units of science. More recent studies, from organizations such as the Southern Regional Education Board and the American College Testing Service, underscore the need for a rigorous curriculum.

The West Virginia Board of Education and the West Virginia Higher Education Policy Commission, recognizing the need for students' completion of demanding coursework in core areas, have called for enhanced high school graduation requirements and more stringent baccalaureate admission standards. The new high school graduate standards, to be implemented in 2008, will have increased requirements in mathematics and science and first time requirements in foreign language for the college preparatory track. Similar to the new graduation requirements are more rigorous baccalaureate admission standards for the state colleges and universities. Beginning in 2008, entering baccalaureate students must have completed at least the following units at the secondary level:

4 English	(including courses in grammar, composition, and literature)
3 Social Studies	(including U.S. History)
4 Mathematics	(three units must be Algebra I and higher)
3 Science	(all courses to be laboratory science; CATS I & II combined count as one lab science unit)

1 Arts

2 Foreign Language (Two units of the same foreign language)

The new baccalaureate admission standards demonstrate the value of a strong core curriculum. The importance of completion of a solid academic core curriculum is assuring success in college cannot be underestimated. Data from the American College Testing Service (ACT) also indicate that students who have taken core courses score significantly higher on ACT exams in English, mathematics, and science reasoning than students who have not taken core courses.

Since data indicate that completion of the core curriculum in high school enhances the opportunities for success in college, prospective college students are encouraged to complete a core curriculum in advance of implementation of the 2007 standards.

# SECTION 5. ACHIEVING MINIMUM LEVELS OF KNOWLEDGE, SKILL AND COMPETENCY NEEDED FOR COLLEGE

#### 5.1 National standardized exams

Two important measures of the preparation of high school students for college are the national standardized examinations, the ACT and SAT tests. Under Higher Education Policy Commission policy, students are normally expected to have achieved at least a score of 17 on the ACT exam (830 on the SAT-1 exam) to be eligible for admission to baccalaureate programs. By 2008, the recommended minimum score for baccalaureate institutions is 19 on the ACT composite (910 on the SAT-1) exam. Several of the state colleges and universities have established higher standardized exam scores for admission. Additionally, certain academic degree programs also have a higher ACT score requirement for admission to a program.

Another important standardized assessment indicator for success in college, is the ACT Explore exam which is administered to all eighth grade students in West Virginia schools. Correlation studies prepared by ACT indicate that students who achieve a minimum of 17 on Explore should when preparing to enter college achieve a score of 17 or higher on the ACT test. Similarly, a student who achieves a score of 20 on Explore should achieve at least a 19 on the ACT exam.

Many West Virginia high school students take the ACT Plan assessment in the tenth grade. According to ACT correlation tables, students receiving a 17 on Plan should score at least a 17 on the ACT exam and students receiving a 19 on Plan should score at least 19 on the ACT test. The new assessment program being developed for the K-12 schools will include ACT Plan as a required instrument to be administered to tenth graders.

Although higher scores on standardized admission examinations such as the ACT or SAT-1 are indications of a greater chance for success in college, the possession of the ACT 17 (SAT 830) minimum score is not essential for admission to college.

The Community and Technical Colleges in West Virginia have an open admission policy and provide developmental course opportunities for students who have deficiencies in specific academic areas and who need additional help before enrolling in an academic program.

5.2 West Virginia Board of Education requirements for graduation

The proposed new requirements for high school graduates being considered by the West Virginia Board of Education will better prepare students for success in college. All students, effective with the 2008 graduating class, would be required to complete a 16-credit academic core. Additionally, students completing the Professional Pathway (college preparatory) track would be required to complete four credits in mathematics, four credits in science, and two credits in foreign language. These requirements, which parallel the new 2008 baccalaureate academic standards, will provide high school graduates a firmer academic foundation.

# SECTION 6. COMMUNICATING KNOWLEDGE, SKILL AND COMPETENCY LEVELS

- 6.1 The state colleges and universities shall expand collaborative efforts with the K-12 schools in making available information on minimum levels of knowledge, skill, and competency that are necessary for successful preparation for college.
  - 6.1.1 Higher Education Policy Commission initiatives described in Section 3.1 of this rule will be effectively implemented with collaborating schools.
  - 6.1.2 System publications on minimum knowledge, skill and competency levels will be issued and disseminated to students, parents, educators and counselors, as well as to admission officers, advisers and faculty in the state colleges.

# SECTION 7. TEACHER PREPARATION PROGRAMS

- 7.1 Teacher preparation programs in the state colleges and universities shall be designed so that educators completing the programs will be able to deliver instruction to K-12 students that will adequately prepare them fully for college or other post-secondary education or gainful employment.
- 7.2 It is important that the teacher education departments be cognizant of changing course unit requirements for high school graduates and prepare teacher education graduates who can effectively teach courses in the core curriculum and in applied academic areas.

# SECTION 8. FUTURE POLICY DEVELOPMENT

8.1 It is the intent of the Higher Education Policy Commission to work closely with the K-12 school systems in West Virginia in enabling students to move readily from the K-12 schools into the state colleges and universities. As the new K-12 learning

standards of the West Virginia Board of Education are developed and implemented, the Higher Education Policy Commission will establish policies as necessary that address academic expectations for beginning college students, admission standards and assessment of student learning.