

National Standards of Quality for Online Courses **Supplemental Document**

Rating Scale

- 0 Absent—component is missing**
- 1 Unsatisfactory—needs significant improvement**
- 2 Somewhat satisfactory—needs targeted improvements**
- 3 Satisfactory—discretionary improvement needed**
- 4 Very satisfactory—no improvement needed**

A - Content

- 1. The course goals and objectives are measurable and clearly state what the participants will know or be able to do at the end of the course.**

Within the learning management system, course goals and objectives are present, explicitly stated, and can be easily found by students. The student's level of mastery is measured against each goal and objective. After reading the list of goals and objectives, students will understand what they will be learning throughout the course.

- 2. The course content and assignments are aligned with state's content standards or nationally accepted content standards set for Advanced Placement courses, technology, computer science, or other courses whose content is not included in state standards.**

There is evidence that the content and assignments for the core courses are explicitly and thoroughly aligned to the credit granting state's academic standards, curriculum frameworks and assessments. Advanced Placement courses should be aligned with the College Board and other elective courses should be aligned to other nationally accepted content standards such as computer science, technology courses, etc.

- 3. Course tasks and assessments align with the required local, state, and national assessments associated with the course.**

There is evidence showing the core subject courses, where students are tested on the subject area (Mathematics, Reading, Language Arts, Science, etc.), are aligned to district, state and national assessments. Advanced Placement courses are aligned to the AP® test, and if applicable, computer science courses required for national

certification are aligned to the national tests (Cisco, Microsoft, etc.) for students to become certified.

4. The course content and assignments are of sufficient rigor, depth, and breadth to teach the standards being addressed.

Rigor is defined as a condition of the learning environment which stretches the individual learner to move beyond his/her comfort zone and grow as an independent learner (Hibbard). Depth refers to the degree to which the course content adheres to the standards being taught. Breadth refers to the completeness of the course (Colorado Online Learning, 2007, p.1). The level of achievement expected of students, and evaluated against should be as challenging as that in a face-to-face classroom.

5. Information literacy and communication skills are incorporated and taught as an integral part of the curriculum.

Today, the core skills associated with computers are relating information, communication, and thinking and learning rather than the hardware itself. A strand of competencies, such as the Partnership for 21st Skills Framework, ISTE NETS (focus on technology) and the American Libraries Association (focus on information), are integrated into the course content.

Specific NETS skills include:

- Creativity and Innovation
 - Communication and Collaboration
 - Research and Information Fluency
 - Critical thinking, Problem Solving, and Decision Making
 - Digital Citizenship
 - Technology Operations and Concepts
- (<http://www.iste.org/AM/Template.cfm?Section=NETS>)

Specific ALA skills include:

- Access information efficiently and effectively
 - Evaluates information critically and competently
 - Uses information accurately and creatively
 - Pursues information related to personal interests
 - Appreciates literature and other creative expressions of information
 - Strives for excellence in information seeking and knowledge generation
 - Recognizes the importance of information to a democratic society
 - Practices ethical behavior in regard to information and information technology
 - Participates effectively in groups to pursue and generate information
- (http://www.ala.org/ala/aasl/aaslproftools/informationpower/InformationLiteracyStandards_final.pdf)

6. Sufficient learning resources and materials to increase student success are available to students before the course begins.

A list of supplies such as textbooks and other instructional materials needed for the course are provided to the student. Course specific resources and materials provided by the course provider are distributed to the student before the course begins. Links to plug-ins (Acrobat Reader, Flash Player, Photoshop, etc.) and other software which students must download to access all content in the course should be provided. Additional materials related to successful strategies for completing an online course are also provided at this time.

7. A clear, complete course overview and syllabus are included in the course.

The posted syllabus provides the student with an introduction to the course, the goals (both content and non-content), the learning objectives, the instructional activities and the assignments, and all policies (e.g., attendance, late work, participation) for the course.

8. Course requirements are consistent with course goals, representative of the scope of the course, and clearly stated.

The scope and sequence of the course is appropriately designed for the subject area and grade level. Concepts and skills are accurately presented, built on one another logically, and connections between concepts and subjects are explicit and relevant. Thus, students have flexibility in approaching the material.

9. Information is provided to students, parents and mentors on how to communicate with the online teacher and course provider, including information on the process for these communications.

Instructor information is provided to students with contact, availability, and biographical information. Information on how to contact the teacher via phone, email, and/or online messaging tools is provided within the contact information. If regular contact with the teacher is required as part of the course, clear expectations for meeting this requirement are posted within the course.

10. Issues associated with the use of copyrighted materials are addressed.

The course follows all copyright and fair use laws.

The University of Maryland University College Center for Intellectual Property provides resources related to intellectual property and copyright law in education. <http://www.umuc.edu/distance/odell/cip/cip.shtml> (Click on Issues and Resources)

Content developers are relying more and more on Creative Commons which “defines the spectrum of possibilities between full copyright — *all rights reserved* — and *no rights reserved*. It allows developers (authors) to keep some of their copyright while permitting some uses of the work. (<http://creativecommons.org/>)

11. Academic integrity and netiquette (Internet etiquette) expectations regarding lesson activities, discussions, e-mail communications and plagiarism are clearly stated.

A “Code of Conduct” including netiquette standards and academic integrity expectations is provided.

12. Privacy policies are clearly stated.

A policy statement is posted on the course provider’s website and/or in the learning management system disclosing the organization’s information gathering and dissemination practices.

13. Instructor resources and notes are included.

Resources and notes to aid instructors in teaching and facilitating the course are included within the learning management system. These resources should be hidden from student view.

14. Assessment and assignment answers and explanations are included.

Answers, explanations, rubrics, and/or examples of completed assessments and assignments are included within the teacher resources and notes in the learning management system for the instructor to use as a guide.

B - Instructional Design

1. Course design reflects a clear understanding of student needs, and incorporates varied ways to learn and multiple levels of mastery of the curriculum.

A variety of instructional and assessment methods are used throughout the course. Students are given a variety of assignments, which allow them to demonstrate their mastery of the content.

2. The course is organized into units and lessons.

Within the learning management system, the content is placed into developed units

and lessons that fall into a logical sequence.

3. The course unit overview describes the objectives, activities and resources that frame the unit. It includes a description of the activities and assignments that are central to the unit.

At the start of each unit, an overview is posted describing the objectives, activities, assignments and resources that frame the unit.

4. Each lesson includes a lesson overview, content and activities, assignments, and assessments to provide multiple learning opportunities for students to master the content.

At the start of each lesson, an overview is posted describing the content, activities, assignments and assessments to be completed during the lesson. A variety of activities, assignments, and assessments are used to provide students with different learning styles to master the content.

5. The course is designed to teach concepts and skills that students will retain over time.

Research shows greater learning when students are engaged in active learning. “Students are involved in more than listening, less emphasis is placed on transmitting information and more on developing students' skills, students are involved in higher-order thinking (analysis, synthesis, evaluation), students are engaged in activities (e.g., reading discussing, writing), and greater emphasis is placed on students' exploration of their own attitudes and values” (Bonwell and Eison, 1991, p. 2).

The course provides multiple opportunities for students to be engaged in the content through collaborative learning groups, student-led review sessions, games, analysis or reactions to videos, discussions, concept mapping, analyzing case studies, etc.

6. The course instruction includes activities that engage students in active learning.

Students are discovering, processing and applying information they learn throughout the course. Less emphasis is placed on giving information and more on discussing, listening, writing, reading, and reflecting.

7. Instruction provides students with multiple learning paths to master the content, based on student needs.

Students are given a variety of activities, assignments, and assessments to allow them to successfully master the content. If a student is unsuccessful with mastering

a particular concept, the course content provides the teacher with suggestions they are able to use in order to provide additional remediation activities or alternative assignments. If a student is not challenged throughout the course, the teacher may adapt the content to add enrichment activities.

8. The teacher engages students in learning activities that address a variety of learning styles and preferences.

Evidence of instructions for the teacher which tell him/her how to provide alternative assignments and assessments to make the best use of each student's talents and skills, as appropriate is provided. If instructions are not provided, past instances of the course are available to demonstrate what the teacher did to meet this standard.

9. The course provides opportunities for students to engage in higher-order thinking, critical-reasoning activities and thinking in increasingly complex ways.

Assignments, activities, and assessments provide opportunities for student to elevate their thinking beyond memorization into the realm of analyzing situations, synthesizing information, or evaluating an argument. Activities should include open-ended questions, and encourage students to categorize and classify information. Opportunities for group work, decision-making, and finding patterns should also be included in the course activities.

10. The course reflects multicultural education and is accurate, current and free of bias.

The course creates equal educational opportunities for students from diverse racial, ethnic, social-class, and cultural groups. The content is up to date, accurate and free of any bias.

11. The teacher can adapt learning activities to accommodate students' needs.

The teacher has access to adapt the course to meet the students' needs by providing additional assignments, resources, and activities for remediation or enrichments for the course.

12. Readability levels, written language assignments and mathematical requirements are appropriate for the course content and the students.

The course content should be written at appropriate readability levels for the grade level of the student audience and the grade level should be prominently explained within the course description. Readability formulas such as Dale-Chall, Fry, Flesch Grade Level, Flesch Reading Ease, FOG, SMOG, FORCAST, Powers-Somner-Kearl, and Spache or software such as Microsoft Word and various websites can be used to

identify the readability level. Mathematical language is also written at the appropriate level for the intended audience.

13. The course design provides opportunities for appropriate instructor-student interaction, including timely and frequent feedback about student progress.

Learning activities and other opportunities are created to foster instructor-student interaction. Students receive timely and frequent feedback on their progress that emphasizes the intended learner outcomes. The feedback is highly individualized, detailed, and recommends specific, individualized improvement, and strategies to encourage continued progress toward mastery.

14. The course provides opportunities for appropriate instructor-student and student-student interaction to foster mastery and application of the material and a plan for monitoring that interaction.

Learning activities and other learning opportunities are developed to foster instructor-student and student-student interaction. The technology and course content encourage exchanges amongst the instructor and students through email, discussions, synchronous chats, simulations, lab activities and other group projects. Within the grading policy, guidelines defining student participation and expectations are provided.

Threaded and/or synchronous discussions are available for developing community, asking and finding answers to questions about the course, and around the course content. Access is available to groups or individual students based on the purpose of the activity. Rules, roles, and expectations for the discussion are clear and posted within the discussion forum.

15. The course provides opportunities for appropriate student interaction with the content to foster mastery and application of the material.

The learning materials require frequent interactions between the student and the content. These interactions emphasize problem solving and constructivist approaches (e.g., simulations, modeling, project-based learning, research, etc.). Interactions are creative and are designed for engaging a wide variety of students. The interactions effectively enhance learning and ensure success.

16. Students have access to resources that enrich the course content.

A wide variety of supplemental tools and resources are clearly identified and readily available within the learning management system.

C - Student Assessment

1. Student evaluation strategies are consistent with course goals and objectives, representative of the scope of the course and clearly stated.

The strategies used to assess students throughout the course are consistent with and aligned to what is presented in the course goals and objectives document posted within the course.

2. The course structure includes adequate and appropriate methods and procedures to assess students' mastery of content.

Multiple assessments allow students to demonstrate their understanding in a variety of contexts. Formative and summative assessments are a part of the structure of the course. Pre-tests, post-tests, objective and subjective questioning, self-assessments, group projects, peer review, evaluating levels and quality of participation, and portfolios are examples of different types of assessments that can be used.

3. Ongoing and frequent assessments are conducted to verify each student's readiness for the next lesson.

When students are frequently assessed with their progress throughout the course, the teacher can adjust the instruction so the student's potential to succeed is enhanced. The course provides frequent and ongoing formative assessments to ensure each student has mastered the content and is prepared to move to the next lesson.

4. Assessment strategies and tools make the student continuously aware of his/her progress in class and mastery of the content beyond letter grades.

The course uses multiple strategies and activities to assess student readiness and progress throughout the course. Qualitative feedback from the teacher on student work and other feedback tools are built into the course for continuous student self-monitoring. Cumulative data on the student's mastery of the content is developed and used regularly to individualize curriculum in a timely and appropriate manner. Remediation and enrichment opportunities are provided based on the progress of the individual student.

5. Assessment materials provide the teacher with the flexibility to assess students in a variety of ways.

The course uses a wide variety of assessment techniques to measure ongoing student progress on clearly identified learner outcomes. Multiple versions of the same test and test banks and alternative evaluation methods are used to gauge

student progress, and authentic assessments are provided to demonstrate meaningful application of the essential knowledge and skills.

6. Grading rubrics and models of partially to fully completed assignments are provided to the teacher.

Explicit rubrics, rationale, and/or characteristics are provided for each graded assignment.

7. Grading policy and practices are easy to understand.

A grading scale that defines letter grades and/or weights, if applicable, is provided. As part of the grading policy, student participation is defined and a mechanism of measuring quality and quantity is provided. Any penalties that may be assessed to grades and/or extra credit opportunities are also provided within the policy.

D - Technology

1. The course architecture permits the online teacher to add content, activities and assessments to extend learning opportunities.

The teacher of record for the course has access to make additions to the content within the learning management course. Access should allow the teacher to add content, activities, and assessments to make the course “their own.” Access to delete or remove content is optional. The “original” base course is saved in another area of the LMS to use for other sections of the course or future offerings.

2. The course accommodates multiple school calendars; e.g., block, 4X4 and traditional schedules

The course is created to adjust to multiple school calendars. Assignments and deadlines can easily be adapted and updated depending on the program offering the course’s schedule.

3. The course is easy to navigate.

Navigation links within the course are organized into key categories in a logical order with students using minimal clicks to get from one place in the course to another.

4. The course makes maximum use of the capabilities of the online medium and makes resources available by alternative means; e.g., video, CDs and pod casts.

Content is offered in a variety of multimedia formats such as text, images, videos, audio, CDs/DVDs, podcasts, and vodcasts to meet the range of students learning styles.

5. Hardware, Web browser and software requirements are specified.

All hardware, web browser and software requirements are identified in the course description or during the student registration process and made available to students before they begin the course.

6. Prerequisite skills in the use of technology are identified.

All prerequisite technology skills (typing, coding, photo editing, etc.), necessary for the specific class, are identified in the course description or during the registration process and made available to students before they begin the course.

7. The course utilizes appropriate content-specific tools and software.

A variety of software and online tools are used appropriately and as needed within the online course. Tools should be easy to use and necessary for teaching and/or enriching the lesson, cross platform and free to the student (or built into the course). The tools should be linked from within the course or sent as software with other course materials at the beginning of the course.

8. Interoperability technical standards allow sharing content among different learning management systems.

The development of technical standards allows widespread and easy access to online applications and services, such as online content. They are designed to increase the ease of which quality teaching and learning resources can be located, transferred and used by teachers and students from one learning management system to another.

“Shareable Content (Courseware) Object Reference Model or SCORM is a collection of standards and specifications adapted from multiple sources to provide a comprehensive suite of e-learning capabilities that enable interoperability, accessibility and reusability of Web-based learning content.” It is aimed at vendors who build Learning management Systems, so that their tools conform to these standards. (<http://www.adlnet.gov/scorm/index.aspx>)

The learning management the course is housed in should meet the SCORM (or other internationally recognized interoperability standard) standard. The compliance information can be found on the LMS' website.

9. Interoperability technical standards ensure sharing of questions, assessments and results with others.

The learning management system should meet the SCORM (or other internationally recognized interoperability standard) standard for sharing of questions, assessments and results. This information can be found on the LMS website.

10. The course meets universal design principles, Section 508 standards and W3C guidelines to ensure access for all students.

Web pages meet the Web Content Accessibility Guidelines and are certified ADA compliant by an accepted certification tool (e.g., “Bobby” (<http://www.cast.org/bobby/>)).

11. Online textbooks used in a course meet nationally endorsed standards (NIMAS) for publishers to ensure distribution of accessible, alternative versions of textbooks and other instructional materials.

The National Instructional Materials Accessibility Standard (NIMAS) is used to ensure textbooks and other instructional materials (software, videos, etc.) are accessible for all students or an alternative version is available for those students with a disability.

12. The course provider offers the course teacher and the school coordinator assistance with technical support and course management.

Online technical help and support should be immediately available any time. If 24/7 support is not available, support hours are clearly posted within the course or on the online program’s website. Alternate methods (Frequently Asked Questions (FAQs) site, resources during training, mentors, etc.) of providing support are also readily available.

13. The course provider offers orientation training.

Students are given an orientation for taking an online course before starting the coursework. The orientation should explain the practical difficulties of working at a distance and what is needed to manage those challenges successfully. Time commitments, software and hardware requirements, and how to set up the student’s computer and work environment are a part of this orientation to prepare them for success in the online course. The training is provided either in written form, through a video, or entirely online.

E - Course Evaluation and Management

1. The results of peer review and student evaluations of courses are available.

Opportunities for students and teachers to review the course are provided. Results

of peer reviews and student evaluations of the course are made available to course reviewers. Evidence is shown that these reviews are completed on a regular basis.

2. Course provider uses multiple ways of assessing course effectiveness.

Examples of course evaluations are provided to course reviewers. A combination of student, teacher, content experts, instructional designer and outside reviewers are used to evaluate the course for effectiveness. University researchers have been encouraged to conduct studies on the effectiveness of the course.

3. The course is evaluated regularly for effectiveness, and the findings are used as a basis for improvement.

Evidence of regularly conducted course evaluations, and how the input is used to improve courses, is made available to course reviewers. A combination of student, teacher, content expert, instructional designer and outside reviewers are used evaluate the course for effectiveness.

4. The course is updated periodically to ensure timeliness.

Within the learning management system the date the course was last updated is posted. Courses should be reviewed at a minimum of every three years to keep the content current, engaging, and relevant.

5. The course provider is authorized to operate in the state in which the course is offered.

The course has met the requirements of the state department of education and/or school district (or their designee) in which it will be offered and credit will be given for the course. Authorization for offering the course can be found in documentation on the authorizer's website.

6. The teacher meets the professional teaching standard established by a state licensing agency or the teacher has academic credentials in the field in which he or she is teaching and has been trained to teach online and to use the course.

Teachers must work with the state licensing agency within the state the course is being offered to ensure he or she meets all teacher licensing requirements for teaching the specific course. Training must be provided for the teacher of the online course, which includes using the technology tools specific to the course and the philosophy of teaching an online course. These policies may be posted on the online program's website and/or are found within the learning management system.

7. Student information remains confidential, as required by the Family Educational Rights and Privacy Act (FERPA).

Defined course procedures for reporting grade and student information complies with the Family Educational Rights and Privacy Act (FERPA) (<http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html>) posted within the course.

F - 21st Century Skills

The course intentionally emphasizes 21st century skills in the course, including using 21st century skills in the core subjects, 21st century content, learning and thinking skills, ICT literacy, self-directed learning, global awareness, and includes 21st century assessments, as identified by the Partnership for 21st Century Skills.

Four elements of 21st century learning:

- Life and Career Skills;
- Learning and Innovation Skills;
- Information, Media, and Technology Skills; and
- Core Subjects and 21st Century Themes.

Life and Career Skills

- Flexibility & Adaptability
- Initiative & Self-Direction
- Social & Cross-Cultural Skills
- Productivity & Accountability
- Leadership & Responsibility

Learning and Innovation Skills

- Critical Thinking & Problem Solving
- Creativity & Innovation
- Communication & Collaboration

Information, Media, and Technology Skills

- Information Literacy
- Media Literacy
- ICT (Information, Communications & Technology) Literacy

Core Subjects and 21st Century Themes

- Economics, English, Government, Arts, History, Geography, Reading or Language Arts, Mathematics, Science, World Languages, and Civics
- Global Awareness
- Financial, Economic, Business & Entrepreneurship Literacy
- Civic Literacy
- Health Literacy

21st Century Curriculum and Instruction:

- Teaches 21st century skills discretely in the context of core subjects and 21st century interdisciplinary themes
- Focuses on providing opportunities for applying 21st century skills across content areas and for a competency-based approach to learning
- Enables innovative learning methods that integrate the use of supportive technologies, inquiry- and problem-based approaches and higher order thinking skills
- Encourages the integration of community resources beyond school walls

The 21st century skills section, above, is from the Partnership for 21st Century Skills website. (<http://www.21stcenturyskills.org/index.php>).

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