

EDIT 530-WT2: Sharable Content Object Reference Model (SCORM)  
Spring 2004

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Course Time/Location: MWF, 6:00 - 9:30 p.m. Commerce I, Rm.100  
Call # 07074 (2 credits)

Course Description:

This course is structured as an overview of the Sharable Content Object Reference Model (SCORM). SCORM defines a Web-based learning "Content Aggregation Model" (CAM) and "Run-time Environment" (RTE) for learning objects. At its simplest, it is a model that references a set of interrelated technical specifications and guidelines designed to meet a set of high-level requirements for Web-based learning content.

Students will focus on specific instructional issues and strategies that make use of SCORM, in addition to matching the instructional strategies with appropriate SCORM implementation tools. Building upon the fundamental technology skills and concepts, students will develop and enhance their skills in implementing SCORM-based projects that will translate into the K-12, higher education or corporate environments both as instructional and/or productivity tools. Coursework will provide the opportunity to increase technological skills through the development of technology-related instructional materials. Class projects will be based on collaboration and students will be expected to use online resources both within and outside the classroom.

**Required Reading:** Source: <http://www.adlnet.org/>  
(Go to SCORM Downloads)

SCORM 1.2 Overview 5/15/2003 <http://www.adlnet.org/index.cfm?fuseaction=DownFile&libid=40&bc=false>  
SCORM 1.3 CAM 10/22/2003 <http://www.adlnet.org/index.cfm?fuseaction=DownFile&libid=586&bc=false>  
SCORM 1.3 RTE 10/22/2003 <http://www.adlnet.org/index.cfm?fuseaction=DownFile&libid=586&bc=false>  
SCORM Conformance Requirements 5/15/2003 <http://www.adlnet.org/index.cfm?fuseaction=DownFile&libid=285&bc=false>  
SCORM 1.3 SeqNav 10/22/2003 <http://www.adlnet.org/index.cfm?fuseaction=DownFile&libid=586&bc=false>

**Additional Resources** Source:

SCORM Best Practices Guidelines <http://www.lsal.cmu.edu/lsal/expertise/projects/developersguide/index.html>  
e-Learning Developers Toolbox <http://www.practicalelearning.com/resources.htm>  
Reload SCORM Player <http://www.reload.ac.uk/scormplayer.html>

SCourse

<http://www.adlnet.org/index.cfm?fuseaction=rcdetails&libid=587>  
<http://www.academiccolab.org/learn/>

Required readings have been selected to enhance both the understanding and application of the technologies introduced in this course. Students are expected to share reactions through participation in online discussions as well as in the classroom. Students are also encouraged to review the additional resources.

**Course Goal:**

Students participating in this course will understand the fundamentals of SCORM. In addition to gaining the theory behind SCORM, students will develop skills in the use of SCORM tools and exercises.

**Course Objectives:**

Class participants will:

- Become familiar with SCORM theory and practice
- Design and develop a Sharable Content Object (SCO)
- Learn how to launch a SCO within a Learning Management System (LMS)
- Learn how to use the SCORM test suite

**Requirements and Evaluation:**

This course requires active participation by all students. Students are expected to be actively involved in all classes as well as an in-class project and a final project. The grading system as reflected in the following table is based on a structured point system allowing students flexibility in earning a desired grade:

COMPONENTS	POINTS	NUMBER	TOTAL POINTS
Attendance/Participation	10	6	60
In-class Project	70	1	70
Final Project	120	1	120
TOTAL			250

Total points for each student will translate into the following grades:

POINTS	GRADE
244-250	A
238-243	A-
232-237	B+
226-231	B
220-225	B-
214-219	C

214 or less	F
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**Attendance:**

The experiential nature of this class requires attendance at all scheduled classes. You will receive up to 10 points for each class attended. If attendance at any of the classes is not possible, please see the Instructor.

In addition:

- Students missing a class are responsible for completing any assignments, readings, etc. prior to the next class.
- Projects are to be submitted electronically on the date due.
- Late projects will not be accepted without making arrangements with the instructor. Late projects may also be sent through e-mail or the Digital Drop Box feature in WebCT.
- Obtaining and using an electronic mail account with access to the Internet is required. GMU makes such accounts available and provides training at no cost to the student.

**Materials:**

You will need a zip disk for classroom activities and projects. In addition, it is recommended that all your work on your final project be placed on a zip disk. These disks can be purchased at most bookstores (including the George Mason University Bookstore) or computer stores.

**Course Topics and Schedule:**

WEEK	DATE	HOMEWORK	CLASS ACTIVITY
1	Jan 5	<u>Required reading due by next class:</u> <ul style="list-style-type: none"> <li>• Read SCORM 1.2 Overview (Section 1.1 - 1.5, pp 1-42)</li> <li>• Read SCORM 1.3 CAM (Sections 1&amp; 2, pp 1-29)</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to Course Format and Syllabus</li> <li>• Introduction to Advanced Distributed Learning</li> <li>• History and origins of SCORM</li> <li>• SCORM Detailed Overview</li> <li>• Examples of Industry adoption of SCORM</li> <li>• Open general discussion on student's needs and expectations of course</li> </ul>
1	Jan 7	<u>Required reading due by next class:</u> <ul style="list-style-type: none"> <li>• Read SCORM 1.3 CAM (Section 3.1 – 3.4, pp 33-45; Section 3.6 – 4.2, pp 82-91; Section 4.5 – 4.5.2, pp 182-190)</li> </ul>	<p>SCORM Content Aggregation Model (CAM) – Detailed discussion on the components used in a learning experience (Content Model), how to package those components for exchange from system to system (Content Packaging), how to describe those components to enable search and discovery (Meta-data), and how to define the sequencing rules for components (Sequencing and Navigation).</p> <p>In-class activity: Creating Sharable Content Objects (SCOs) – Group activity</p>
1	Jan 9	<u>Required reading due by next class:</u> <ul style="list-style-type: none"> <li>• Read SCORM 1.3 RTE (Section 1, pp 1-20)</li> </ul>	<ul style="list-style-type: none"> <li>• Discussion and in-class exercise on Content Packaging</li> <li>• In-class project: Creating SCOs and Packaging</li> </ul>

		<b>Complete In-class project on Content Packaging BY THE END OF CLASS</b>	<p>them</p> <ul style="list-style-type: none"> <li>Final Project Discussion</li> </ul>
2	Jan 12	<u>Required reading due by next class:</u> <ul style="list-style-type: none"> <li>Read SCORM 1.3 SeqNav(Sections 1 &amp; 2, pp 1-35)</li> <li>Read SCORM Conformance Requirements (Sections 1 – 2.1.1.1,pp 1-14, 18-24)</li> </ul>	<ul style="list-style-type: none"> <li>Discussion on SCORM Run Time Environment (RTE) that will describe the Learning Management System (LMS) requirements in managing the run-time environment (i.e., content launch process, standardized communication between content and LMSs and standardized data model elements used for passing information relevant to the learner's experience with the content). Will also discuss the requirements of SCOs and their use of a common Application Programming Interface (API) and the SCORM RTE Data Model</li> <li>In-class activity: SCourse</li> </ul>
2	Jan 14	<u>Preparation for last class:</u> <ul style="list-style-type: none"> <li>Final Project presentation</li> </ul>	<ul style="list-style-type: none"> <li>SCORM Test Suite</li> <li>Intro to SCORM Sequencing and Navigation – Discussion on how SCORM-conformant content may be sequenced to the learner through a set of learner-initiated navigation events. The branching and flow of that content may be described by a predefined set of activities, typically defined at design time.</li> <li>In-class activity: Work on Final Project</li> </ul>
2	Jan 16	<b>TURN IN BY END OF CLASS: Final Project on disk</b>	<ul style="list-style-type: none"> <li>Additional SCORM Resources Discussion</li> <li>Presentation of final projects</li> </ul>

**Due Dates:**

PROJECTS	DATE DUE
In-class Project	Jan 9
Final Project	Jan 16