EDIT 575 - Authoring Tools
Intro to Authorware

George Mason University – Winter 2006

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Office hours: By Appointment

Required Text: Instructor provided handouts
Additional Resources:
- Authorware Listserv: http://www.e-media.nl/aware
- Dazzletech: http://www.authorware.com
- Macromedia: http://www.macromedia.com
- An Authorware Guru: http://www.authorware-amy.com

Methodology:
This course provides an introduction to the Macromedia Authorware program, one of the most utilized interactive multimedia authoring tools in the field. Students will have the opportunity to learn the fundamentals of Authorware through in class demonstrations, hands-on lab instruction and, assignments consisting of developing instructional sequences. Utilizing Authorware, this course will provide the designer with the core foundations for the development of computer-based training.

Course Objectives:
At the conclusion of this course, using Macromedia Authorware each student will be able to:

1) Describe the use for each of the 14 major icons and demonstrate 12.
2) Develop a basic self-directed training application utilizing basic capabilities.
3) Apply the instructional design process to the development of computer-based instruction through authentic prototype projects.
4) Incorporate basic multimedia elements such as graphics, video, and audio to enhance the user interaction.

Requirements:
1) Attendance in class is mandatory, as discussions, lectures and hands-on lab activities are important parts of the course.
2) Each student is expected to complete all assignments and participate in class.
3) Students missing a class are responsible for completing any assignments, readings, etc... prior to the next class. Students also must contact the instructor before the absence to make arrangements for missed work.
4) A USB Drive or 100 mb Zip Disk to back-up work.
Assignments:  **Authorware Exercises:**
Each student will be expected to complete 2 small programming assignments using Macromedia Authorware. These assignments will coincide with the discussions and hands-on lab activities. The purpose of these exercises is to reinforce what is learned in class. The topic for each exercise can be selected by the student, but must be pre-approved by the instructor. The exercises will be combined as part the final exercise.
Final Exercise:

Each student will be expected to design and develop a Computer Based Training application using Macromedia Authorware. The topic of this application will be selected by the student and must be pre-approved by the instructor. It is strongly recommended that the topic be in an area of the student’s expertise so that more time can be dedicated to the design and development rather than research of the subject matter. Specifications about this assignment will be distributed in a timely manner. The application should be robust enough to communicate the overall design approach and attempt to actively engage the user with creative application of interactions.

Late Policy

Late assignments will not be accepted without prior approval from the instructor. If approved, 3 points will be deducted for each class that an assignment is late. If a student’s absence is approved by the instructor in advance or is accepted by University policy, then the student may submit the assignment during next night the class meets without penalty.

Grading:

Final Grades will be calculated on the following percentages:

- Exercise #1 20 pts
- Exercise #2 20 pts
- Final Exercise 40 pts
- Quiz 10 pts
- Class Participation 10 pts
- Total: 100 pts

Final Grades:

- 97-100: A+
- 93-96.9: A
- 90-92.9: A-
- 87-89.9: B+
- 83-86.5: B
- 78-82.9: B-
- 65-77.9: C

Grades are based on the completion of course requirements and on the scope, quality, and creativity of assignments.
1) The IT program website is at: http://it.gse.gmu.edu/ Check this website periodically for course descriptions, program requirements, applications requirements, and other useful information.

2) All students must subscribe to the IT listserv. Instructions on how to subscribe can be found at: http://it.gse.gmu.edu/itlist.shtml (or from the IT homepage, click on Resources and then on the IT listserv icon). The IT listserv keeps you informed about course schedule changes, program announcements, special topics courses, important deadlines, job announcements, internships, etc.

3) If you are an Extended Studies student, you must submit a formal graduate application in order to qualify for the multimedia development certificate. Check the IT website for information on how to obtain a graduate application and what the admission requirements and procedures are.

4) If you are an Extended Studies student, you can only take up to 12 credits under this status. Once you submit a graduate application and you are accepted into one of our IT programs, you can transfer up to 12 credits to your degree program.

5) A student who is pursuing a multimedia development certificate (or any certificate) should follow all procedures for graduation. This includes activating your intent to graduate and meeting with your advisor to get appropriate signatures and paperwork submitted. Information about graduation processes can be found at: http://registrar.gmu.edu/grad/graduation.html

6) Every student must consult with their advisor periodically to make sure that they are registering for the right courses and in the right sequence. Adjunct faculty are not responsible for advising students on programmatic issues.
## Macromedia Authorware – Winter 2006
### Class Schedule and Assignments

<table>
<thead>
<tr>
<th>Date</th>
<th>Chapters/Activities</th>
<th>Icons</th>
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| Jan. 10 | Course Introduction  
The Authorware Interface – Chapter 1  
Creating Display Elements – Chapter 2  
Importing External Media – Chapter 3  
**Topic for Assignments**                      | Display  
Wait, Erase, & Map  
Sound, Digital Movie, & Library |
| Jan. 12 | Creating Simple Animation – Chapter 4  
An Introduction to Interactivity – Chapter 5  
• Keypress Interaction  
• Button Interactions  
• Setting up the Main Menu  
The Framework Icon Structure – Chapter 6  
Creating Interactions (Part 1) – Chapter 7  
• Hot Spot Interactions  
• Hot Spot Rollover  
• Hot Object Interactions                      | Motion  
Interaction  
Framework & Navigate |
| Jan. 14 | Creating Sequences using the Decision icon – Chapter 8  
Creating Interactions (Part 2) – Chapter 9  
• Target Area (Drag & Drop) Interactions  
• Tries Limit  
• Text Entry Interactions  
• Time Limit  
**Assignment #1 Due**                              | Decision |
| Jan. 17 | Variables and Functions – Chapter 10  
Publishing a Piece – Chapter 11  
**Quiz**                                             | Calculation  
(Quit function) |
| Jan. 19 | Using Other Media (Quick Time, Flash, and Animated GIF) – Chapter 12  
**Assignment #2 Due**                                | Sprites |
| Jan. 21 | Lab Time  
**Final Project Due**  
Final Project Presentations                         |                             |

**This schedule is subject to change**
FAIR USE GUIDELINES FOR EDUCATIONAL MULTIMEDIA*

TABLE OF CONTENTS

1. INTRODUCTION

1.1 Preamble
Fair use is a legal principle that defines the limitations on the exclusive rights** of copyright holders. The purpose of these guidelines is to provide guidance on the application of fair use principles by educators, scholars and students who develop multimedia projects using portions of copyrighted works under fair use rather than by seeking authorization for non-commercial educational uses. These guidelines apply only to fair use in the context of copyright and to no other rights.

There is no simple test to determine what is fair use. Section 107 of the Copyright Act*** sets forth the four fair use factors which should be considered in each instance, based on particular facts of a given case, to determine whether a use is a "fair use": (1) the purpose and character of use, including whether such use is of a commercial nature or is for nonprofit educational purposes, (2) the nature of the copyrighted work, (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole, and (4) the effect of the use upon the potential market for or value of the copyrighted work.

While only the courts can authoritatively determine whether a particular use is fair use, these guidelines represent the participants**** consensus of conditions under which fair use should generally apply and examples of when permission is required. Uses that exceed these guidelines may nor may not be fair use. The participants also agree that the more one exceeds these guidelines, the greater the risk that fair use does not apply.

The limitations and conditions set forth in these guidelines do not apply to works in the public domain--such as U.S. Government works or works on which copyright has expired for which there are no copyright restrictions--or to works for which the individual or institution has obtained permission for the particular use. Also, license agreements may govern the uses of some works and users should refer to the applicable license terms for guidance.

The participants who developed these guidelines met for an extended period of time and the result represents their collective understanding in this complex area. Because digital technology is in a dynamic phase, there may come a time when it is necessary to review the guidelines. Nothing in these guidelines shall be construed to apply to the fair use privilege in any context outside of educational and scholarly uses of educational multimedia projects.

This Preamble is an integral part of these guidelines and should be included whenever the guidelines are reprinted or adopted by organizations and educational institutions. Users are encouraged to reproduce and distribute these guidelines freely without permission; no copyright protection of these guidelines is claimed by any person or entity.

*These Guidelines shall not be read to supersede other preexisting education fair use guidelines that deal with the Copyright Act of 1976. **See Section 106 of the Copyright Act. ***The Copyright Act of 1976, as amended, is codified at 17 U.S.C. Sec.101 et seq. ****The names of the various organizations participating in this dialog appear at the end of these guidelines and clearly indicate the variety of interest groups involved, both from the standpoint of the users of copyrighted material and also from the standpoint of the copyright owners.

1.2 Background
These guidelines clarify the application of fair use of copyrighted works as teaching methods are adapted to new learning environments. Educators have traditionally brought copyrighted books, videos, slides, sound recordings and other media into the classroom, along with accompanying projection and playback equipment. Multimedia creators integrated these individual instructional resources with their own original works in a meaningful way, providing compact educational tools that allow great flexibility in teaching and learning. Material is stored so that it may be retrieved in a nonlinear fashion, depending on the needs or interests of learners. Educators can use multimedia projects to respond spontaneously to students' questions by referring quickly to relevant portions. In addition, students can use multimedia projects to pursue independent study according to their needs or at a pace appropriate to their capabilities. Educators and students want guidance about the application of fair use principles when creating their own multimedia projects to meet specific instructional objectives.

1.3 Applicability of These Guidelines
(Certain basic terms used throughout these guidelines are identified in bold and defined in this section.)
These guidelines apply to the use, without permission, of portions of lawfully acquired copyrighted works in educational multimedia projects which are created by educators or students as part of a systematic learning activity by non-print educational institutions. **Educational multimedia projects** created under these guidelines incorporate students’ or educators' original material, such as course notes or commentary, together with various copyrighted media formats including but not limited to, motion media, music, text material, graphics, illustrations, photographs and digital software which are combined into an integrated presentation. **Educational institutions** are defined as nonprofit organizations whose primary focus is supporting research and instructional activities of educators and students for noncommercial purposes.

For the purposes of the guidelines, educators include faculty, teachers, instructors, and others who engage in scholarly, research and instructional activities for educational institutions. The copyrighted works used under these guidelines are **lawfully acquired** if obtained by the institution or individual through lawful means such as purchase, gift or license agreement but not pirated copies. Educational multimedia projects which incorporate portions of copyrighted works under these guidelines may be used only for **educational purposes** in systematic learning activities including use in connection with non-commercial curriculum-based learning and teaching activities by educators to students enrolled in courses at nonprofit educational institutions or otherwise permitted under Section 3. While these guidelines refer to the creation and use of educational multimedia projects, readers are advised that in some instances other fair use guidelines such as those for off-air taping may be relevant.

2. **PREPARATION OF EDUCATIONAL MULTIMEDIA PROJECTS USING PORTIONS OF COPYRIGHTED WORKS** These uses are subject to the Portion Limitations listed in Section 4. They should include proper attribution and citation as defined in Sections 6.2.

2.1 **By students** Students may incorporate portions of lawfully acquired copyrighted works when producing their own educational multimedia projects for a specific course.

2.2 **By Educators for Curriculum-Based Instruction** Educators may incorporate portions of lawfully acquired copyrighted works when producing their own educational multimedia programs for their own teaching tools in support of curriculum-based instructional activities at educational institutions.

3. **PERMITTED USES OF EDUCATIONAL MULTIMEDIA PROGRAMS CREATED UNDER THESE GUIDELINES** Uses of educational multimedia projects created under these guidelines are subject to the Time, Portion, Copying and Distribution Limitations listed in Section 4.

3.1 **Student Use** Students may perform and display their own educational multimedia projects created under Section 2 of these guidelines for educational uses in the course for which they were created and may use them in their own portfolios as examples of their academic work for later personal uses such as job and graduate school interviews.

3.2 **Educator Use for Curriculum-Based Instruction** Educators may perform and display their own educational multimedia projects created under Section 2 for curriculum-based instruction to students in the following situations:

3.2.1 for face-to-face instruction,

3.2.2 assigned to students for directed self-study,

3.2.3 for remote instruction to students enrolled in curriculum-based courses and located at remote sites, provided over the educational institution's secure electronic network in real-time, or for after class review or directed self-study, provided there are technological limitations on access to the network and educational multimedia project (such as a password or PIN) and provided further that the technology prevents the making of copies of copyrighted material.

If the educational institution's network or technology used to access the educational multimedia project created under Section 2 of these guidelines cannot prevent duplication of copyrighted material, students or educators may use the multimedia educational projects over an otherwise secure network for a period of only 15 days after its initial real-time remote use in the course of instruction or 15 days after its assignment for directed self-study. After that period, one of the two use copies of the educational multimedia project may be placed on reserve in a learning resource center, library or similar facility for on-site use by students enrolled in the course. Students shall be advised that they are not permitted to make their own copies of the multimedia project.

3.3 **Educator Use for Peer Conferences** Educators may perform or display their own multimedia projects created under Section 2 of these guidelines in presentations to their peers, for example, at workshops and conferences.

3.4 **Educator Use for Professional Portfolio** Educators may retain educational multimedia projects created under Section 2 of these guidelines in their personal portfolios for later personal uses such as tenure review or job interviews.

3

4. **LIMITATIONS—TIME, PORTION, COPYING AND DISTRIBUTION** The preparation of educational multimedia projects incorporating copyrighted works under Section 2, and the use of such projects under Section 3, are subject to the limitations noted below.
5.3 Distribution of Multimedia Projects Beyond Limitations Listed in These Guidelines

Educators and students must seek individual permissions for all copyrighted works incorporated in their personally created educational multimedia projects before replicating or distributing beyond the limitations listed in Section 4.3. In the aggregate means the total amount of copyrighted material from a single copyrighted work that is permitted to be used in an educational multimedia project without permission under these guidelines. These limits apply cumulatively to each educator's or student's multimedia project(s) for the same academic semester, cycle or term. All students should be instructed about the reasons for copyright protection and the need to follow these guidelines. It is understood, however, that students in kindergarten through grade six may not be able to adhere rigidly to the portion limitations in this section in their independent development of educational multimedia projects. In any event, each such project retained under Sections 3.1 and 4.3 should comply with the portion limitations in this section.

4.2 Duplication of Multimedia Projects Beyond Limitations Listed in These Guidelines

Portion limitations mean the amount of a copyrighted work that can reasonably be used in educational multimedia projects under these guidelines regardless of the original medium from which the copyrighted works are taken. In the aggregate means the total amount of copyrighted material from a single copyrighted work that is permitted to be used in an educational multimedia project without permission under these guidelines. These limits apply cumulatively to each educator's or student's multimedia project(s) for the same academic semester, cycle or term.

All students should be instructed about the reasons for copyright protection and the need to follow these guidelines. It is understood, however, that students in kindergarten through grade six may not be able to adhere rigidly to the portion limitations in this section in their independent development of educational multimedia projects. In any event, each such project retained under Sections 3.1 and 4.3 should comply with the portion limitations in this section.

4.1 Time Limitations

Educators may use their educational multimedia projects created for educational purposes under Section 2 of these guidelines for teaching courses, for a period of up to two years after the first instructional use with a class. Use beyond that time period, even for educational purposes, requires permission for each copyrighted portion incorporated in the production. Students may use their educational multimedia projects as noted in Section 3.1.

4.2 Portion Limitations

Portion limitations mean the amount of a copyrighted work that can reasonably be used in educational multimedia projects under these guidelines regardless of the original medium from which the copyrighted works are taken. In the aggregate means the total amount of copyrighted material from a single copyrighted work that is permitted to be used in an educational multimedia project without permission under these guidelines. These limits apply cumulatively to each educator's or student's multimedia project(s) for the same academic semester, cycle or term.

All students should be instructed about the reasons for copyright protection and the need to follow these guidelines. It is understood, however, that students in kindergarten through grade six may not be able to adhere rigidly to the portion limitations in this section in their independent development of educational multimedia projects. In any event, each such project retained under Sections 3.1 and 4.3 should comply with the portion limitations in this section.

4.2.1 Motion Media

Up to 10% or 3 minutes, whichever is less, in the aggregate of a copyrighted motion media work may be reproduced or otherwise incorporated as part of a multimedia project created under Section 2 of these guidelines.

4.2.2 Text Material

Up to 10% or 1000 words, whichever is less, in the aggregate of a copyrighted work consisting of text material may be reproduced or otherwise incorporated as part of a multimedia project created under Section 2 of these guidelines. An entire poem of less than 250 words may be used, but no more than three poems by one poet, or five poems by different poets from any anthology may be used. For poems of greater length, 250 words may be used, but no more than three excerpts by a poet, or five excerpts by different poets from a single anthology may be used.

4.2.3 Music, Lyrics, and Music Video

Up to 10%, but in no event more than 30 seconds, of the music and lyrics from an individual musical work (or in the aggregate of extracts from an individual work), whether the musical work is embodied in copies, or audio or audiovisual works, may be reproduced or otherwise incorporated as a part of a multimedia project created under Section 2. Any alterations to a musical work shall not change the basic melody or the fundamental character of the work.

4.2.4 Illustrations and Photographs

The reproduction or incorporation of photographs and illustrations is more difficult to define with regard to fair use because fair use usually precludes the use of an entire work. Under these guidelines a photograph or illustration may be used in its entirety but no more than 5 images by an artist or photographer may be reproduced or otherwise incorporated as part of a multimedia project created under Section 2.

When using photographs and illustrations from a published collective work, not more than 10% or 15 images, whichever is less, may be reproduced or otherwise incorporated as part of an educational multimedia project created under Section 2.

4.2.5 Numerical Data Sets

Up to 10% or 2500 fields or cell entries, whichever is less, from a copyrighted database or data table may be reproduced or otherwise incorporated as part of an educational multimedia project created under Section 2 of these guidelines. A field entry is defined as a specific item of information, such as a name or Social Security number, in a record of a database file. A cell entry is defined as the intersection where a row and a column meet on a spreadsheet.

4.3 Copying and Distribution Limitations

Only a limited number of copies, including the original, may be made of an educator's educational multimedia project. For all of the uses permitted by Section 3, there may be no more than two use copies only one of which may be placed on reserve as described in Section 3.2.3.

An additional copy may be made for preservation purposes but may only be used or copied to replace a use copy that has been lost, stolen, or damaged. In the case of a jointly created educational multimedia project, each principal creator may retain one copy but only for the purposes described in Sections 3.3 and 3.4 for educators and Section 3.1 for students.

5. EXAMPLES OF WHEN PERMISSION IS REQUIRED

5.1 Using Multimedia Projects for Non-Educational or Commercial Purposes

Educators and students must seek individual permissions (licenses) before using copyrighted works in educational multimedia projects for commercial reproduction and distribution.

5.2 Duplication of Multimedia Projects Beyond Limitations Listed in These Guidelines

Even for educational uses, educators and students must seek individual permissions for all copyrighted works incorporated in their personally created educational multimedia projects before replicating or distributing beyond the limitations listed in Section 4.3.

4.3.3 Distribution of Multimedia Projects Beyond Limitations Listed in These Guidelines

Educators and students may not use their personally created educational multimedia projects over electronic networks, except for uses as described in Section 3.2.3, without obtaining permissions for all copyrighted works incorporated in the program.
6. IMPORTANT REMINDERS

6.1 Caution in Downloading Material from the Internet Educators and students are advised to exercise caution in using digital material downloaded from the Internet in producing their own educational multimedia projects, because there is a mix of works protected by copyright and works in the public domain on the network. Access to works on the Internet does not automatically mean that these can be reproduced and reused without permission or royalty payment and, furthermore, some copyrighted works may have been posted to the Internet without authorization of the copyright holder.

6.2 Attribution and Acknowledgement Educators and students are reminded to credit the sources and display the copyright notice © and copyright ownership information if this is shown in the original source, for all works incorporated as part of the educational multimedia projects prepared by educators and students, including those prepared under fair use. Crediting the source must adequately identify the source of the work, giving a full bibliographic description where available (including author, title, publisher, and place and date of publication). The copyright ownership information includes the copyright notice ©, year of first publication and name of the copyright holder.

The credit and copyright notice information may be combined and shown in a separate section of the educational multimedia project (e.g. credit section) except for images incorporated into the project for the uses described in Section 3.2.3. In such cases, the copyright notice and the name of the creator of the image must be incorporated into the image when, and to the extent, such information is reasonably available; credit and copyright notice information is considered "incorporated" if it is attached to the image file and appears on the screen when the image is viewed. In those cases when displaying source credits and copyright ownership information on the screen with the image would be mutually exclusive with an instructional objective (e.g. during examinations in which the source credits and/or copyright information would be relevant to the examination questions), those images may be displayed without such information being simultaneously displayed on the screen. In such cases, this information should be linked to the image in a manner compatible with such instructional objectives.

6.3 Notice of Use Restrictions Educators and students are advised that they must include on the opening screen of their multimedia program and any accompanying print material a notice that certain materials are included under the fair use exemption of the U.S. Copyright Law and have been prepared according to the multimedia fair use guidelines and are restricted from further use.

6.4 Future Uses Beyond Fair Use Educators and students are advised to note that if there is a possibility that their own educational multimedia project incorporating copyrighted works under fair use could later result in broader dissemination, whether or not as commercial product, it is strongly recommended that they take steps to obtain permissions during the development process for all copyrighted portions rather than waiting until after completion of the project.

6.5 Integrity of Copyrighted Works: Alterations Educators and students may make alterations in the portions of the copyrighted works they incorporate as part of an educational multimedia project only if the alterations support specific instructional objectives. Educators and students are advised to note that alterations have been made.

6.6 Reproduction or Decompilation of Copyrighted Computer Programs Educators and students should be aware that reproduction or decompilation of copyrighted computer programs and portions thereof, for example the transfer of underlying code or control mechanisms, even for educational uses, are outside the scope of these guidelines.

6.7 Licenses and Contracts Educators and students should determine whether specific copyrighted works, or other data or information are subject to a license or contract. Fair use and these guidelines shall not preempt or supersede licenses and contractual obligations.


*The Association of American Publishers (APA) membership includes over 200 publishers.

**The Creative Incentive Coalition membership includes the following organizations: --Association of American Publishers --Association of Independent Television Stations --Association of Test Publishers --Business Software


APPENDIX B: ORGANIZATIONS PARTICIPATING IN GUIDELINE DEVELOPMENT: Being a participant does not necessarily mean that the organization has or will endorse these guidelines. Agency for Instructional Technology (AIT) American Association of Community Colleges (AACC) American Association of Higher Education (AAHE) American Library Association (ALA) American Society of Journal Authors, Inc. (ASJA)