



**New York City College of Technology**  
**The City University of New York**

*School of Technology and Design*  
Interactive Media Technologies

**Course Name**

IMT1000 - Technology Skills Lab

**Credit Hours**

1 Credits, 3 hours (0 lecture, 3 lab)

**Pre/Co-requisites**

ENG1101

**Course Description**

This 1-credit Lab consists of a series of workshops that offer supportive training in current technology and tools. Six workshops are offered each semester for two to three weeks at a time, including Image Workshop, Time Workshop, Sound Workshop, Control Workshop, Systems Workshop, and Management Workshop. These workshops cover applications and tools for digital imaging, video, animation, sound, physical computing, computer systems, and project management. The faculty-supported, workshop environment encourages self-learning, which will help students stay relevant in the face of the rapid technological change.

**Projected Head Count**

16

**Course Goals**

- To provide supportive training in industry-standard tools and applications used for the development of interactive media technologies.
- To provide up-to-date training in rapidly evolving technologies.
- To facilitate and encourage self-learning techniques

**Rationale**

The rationale for offering this 1-credit Technology Skills Lab stems from instructional design theories, which suggest that curriculum can be structured in a way that is flexible and adaptable to ongoing changes in technology. By providing workshops for evolving technologies, such as computer applications and equipment, more class time can be devoted to principle-based learning objectives in the core courses. The faculty-supported Lab encourages students to investigate the technology in a workshop environment that promotes self-learning. It is proposed that this structure will present the necessary technology training and problem-solving skills to help the students and the curriculum stay abreast of technologies as they continue to evolve.

## Instructional Objectives and Assessment

<b>Instructional Objectives:</b> <i>For the successful completion of this course, students should be able to:</i>	<b>Assessment:</b> <i>Instructional Activity, Evaluation Methods and Criteria</i>
Effectively utilize equipment and applications for the creation of graphics, animation, audio, and video content.	Portfolio Assessment, a collection of projects completed in each of the six workshops, will be used to determine if the student needs to repeat the lab.
Employ basic markup, scripting and interactivity languages, electronic and physical computing controls, using current protocols and standards.	Portfolio Assessment, a collection of projects completed in each of the six workshops, will be used to determine if the student needs to repeat the lab.
Demonstrate a technical understanding of the applications, tools, and technologies presented in each of the six workshops and explain how they relate to the collaborative development of interactive media.	Practical exams are will be used to test technical skills and practical concepts.
Develop a plan and process for self-learning of evolving media technologies, applications and tools.	Peer-to-peer tutoring and learning logs will be used to determine if students have developed self-learning and problem-solving skills and techniques.

### Teaching/Learning Methods

- Peer-to-peer tutoring and learning logs to establish self-learning skills and techniques
- Use of visual and tactile examples and hands-on weekly projects and experiments
- Laboratory production sessions
- Practical exams

### Recommend Supplies

- USB Flash Card.
- MiniDV Tapes.
- DVD's and CD's.
- Digital camera

### Grading Policy and Procedure

Grades will be awarded using the standard grading scale, but will be judged based upon a rubric that takes into consideration effort applied, technical understanding & creative use of media resources for the completion of various assignments

Grades will be based upon:

- 10% Participation
- 70% Projects and experiments
- 10% Quizzes and practical exams
- 10% Portfolio assessment

**Attendance:** Attendance is required for all classes. If a student misses a class session, it is the student's responsibility to make up any work missed. More than 3 absences will result in an "F" (Failure). TWO LATE ARRIVALS = ONE ABSENCE.

**Make-ups:** If a student finds they will not be able to present or hand in a project on the scheduled day, it is the student's responsibility to notify the instructor PRIOR to that due date.

**Weekly Outline** (actual Concept Modules and length will vary)

Week	Concept Modules	Instructional Objective	Instructional Activity and Assessment
1	Image Workshop	Implement learned technical skills to accurately capture digital images using a camera in the studio environment and in the field.	Overview of equipment, techniques and applications and hands-on, in-class projects.
2	Image Workshop	Create and edit digital images and graphics using current industry-standard applications.	Demonstration of equipment, techniques and applications and hands-on, in-class projects. Practical Exam
3	Time Workshop	Implement learned technical skills to accurately capture digital video using a camera in the studio environment and in the field.	Overview of equipment, techniques and applications and hands-on, in-class projects.
4	Time Workshop	Create and composite digital video, motion graphics, and animation using current industry-standard applications and sequential imaging techniques.	Demonstration of equipment, techniques and applications and hands-on, in-class projects. Practical Exam
5	Sound Workshop	Implement learned technical skills to accurately capture digital audio using a recording and input device in the studio environment and in the field.	Overview of equipment, techniques and applications and hands-on, in-class projects.
6	Sound Workshop	Mix and edit digital audio using current industry-standard applications.	Demonstration of equipment, techniques and applications and hands-on, in-class projects. Practical Exam

7	Control Workshop	Demonstrate an understanding of basic electronics principles.	Overview of equipment, techniques and applications and hands-on, in-class projects.
8	Control Workshop	Use current industry-standard applications, languages, and learned technical skills to accurately carryout basic physical computing controls and functions.	Demonstration of equipment, techniques and applications and hands-on, in-class projects. Practical Exam
9	Systems Workshop	Demonstrate an understanding the technical principles of computation, scripting languages, and interactive communication systems.	Overview of equipment, techniques and applications and hands-on, in-class projects.
10	Systems Workshop	Develop interactive, networked-based environments using current industry-standard applications, languages, and protocols.	Demonstration of equipment, techniques and applications and hands-on, in-class projects. Practical Exam
11	Management Workshop	Demonstrate an understanding of administrative concepts and principles using industry-standard applications.	Overview of equipment, techniques and applications and hands-on, in-class projects.
12	Management Workshop	Implement learned technical skills to develop project management documents, including schedules, budgets, project flowcharts, and reports.	Demonstration of equipment, techniques and applications and hands-on, in-class projects. Practical Exam
13	Open Lab	Work independently or in teams to produce a portfolio of all workshop projects.	Open Lab production sessions
14	Open Lab	Work independently or in teams to produce a portfolio of all workshop projects.	Open Lab production sessions
15	Project Portfolio Review	Confidently present final portfolio to faculty and students and critically discuss the work of their peers.	Portfolio review. Team-based critique and discussion activities led by faculty and students.

## **Bibliography:**

Understanding Your Users: A Practical Guide to User Requirements Methods, Tools, and Techniques, Catherine Courage, Morgan Kaufmann 2004

Managing Interactive Media: Project Management for Web and Digital Media, Elaine England, Andy Finney, Addison-Wesley 4 edition 2007

Physical Computing: Sensing and Controlling the Physical World with Computers, Tom Igoe, Dan O'Sullivan, Course Technology PTR; 1 edition, 2004

Practical Electronics for Inventors, Paul Scherz, McGraw-Hill/TAB Electronics; 2 edition, 2006

Digital Video Hacks: Tips & Tools for Shooting, Editing, and Sharing, O'Reilly Media, Inc.; 1 edition, 2005

Principles of Digital Audio, Ken C Pohlmann, McGraw-Hill; 5 edition, 2005

XML: Your visual blueprint for building expertwebsites with XML, CSS, XHTML, and XSLT, Rob Huddleston, Visual, 2007

HTML Dog: The Best-Practice Guide to XHTML and CSS, Patrick Griffiths, New Riders Press, 2006

DOM Scripting: Web Design with JavaScript and the Document Object Model, Jeremy Keith, friends of ED; First edition, 2005

Introduction to Computing and Programming with Java: A Multimedia Approach, Mark Guzdial, Prentice Hall; Pap/Cdr edition, 2006

Type, Image, Message: A Graphic Design Layout Workshop, Nancy Skolos, Tom Wedell, Rockport Publishers, 2006

Sensation and Perception, Jeremy M. Wolfe, Sinauer Associates Incorporated, 2005

Digital Imaging: Essential Skills, Third Edition, Mark Galer, Les Horvat, Focal Press; 3 edition, 2005

Motion Design: Moving Graphics for Television, Music, Video, Cinema and Digital Interfaces, Matt Woolman, Rotovision, 2004

## **Web Resources:**

[www.flashkit.com](http://www.flashkit.com)

<http://audacity.sourceforge.net>

<http://www.apple.com/support/garageband/>

<http://photoarchive.ap.org/>

[www.gettyimages.com](http://www.gettyimages.com)

<http://www.jupiterimages.com/en/>

[www.corbisimages.com](http://www.corbisimages.com)

[www.prelinger.com](http://www.prelinger.com)