

CSE/ISE 334

Introduction to Multimedia Systems

Instructor: Tony Scarlatos

Time: TuTh 2:00 - 3:20

Location: CS 2205

Office Hours: Held online via Google Meet
By appointment only
Friday 10 - 11:30 am

Email: intromm@cs.stonybrook.edu

Home Page: <http://www3.cs.stonybrook.edu/~tony/intromm>

Course Description

Survey of technologies available for user interfaces. Discussion of hypertext; voice, music, and video together with tools and models for capturing, editing, presenting, and combining them. Capabilities and characteristics of a range of peripheral devices including devices based on posture, gesture, head movement, and touch. Case studies of academic and commercial multimedia systems including virtual reality systems. Students participate in laboratory exercises and build a multimedia project. This course is offered as both CSE 334 and ISE 334.

Prerequisite: U2, U3 or U4 standing; CSE or ISE major

3 credits

Course Objectives

Upon completion of the course students should demonstrate an understanding of multimedia standards and their perceptual limitations. Students should also be able to digitize and process audio and images, and compress and encode the files appropriately for a variety of delivery methods. They should be able to capture motion and render it realistically, and should also be able to model objects in 3D, render, and animate them. Finally students should be able to synchronize these diverse media elements in a linear presentation.

Course Delivery Mode and Structure

Some class meetings may be conducted via Zoom, **but the class is almost exclusively in-person**. See the [Zoom for Students](https://it.stonybrook.edu/services/zoom/students) page (<https://it.stonybrook.edu/services/zoom/students>) for more information on how to download and use this application.

We will also be using **Class Question**. If you already have a Class Question account, skip to step 2. If you are new to it, start at step 1.

1. Go to classquestion.com/students and click "Click here to register". This link will allow you to register for the site.
2. Once you have registered, go to classquestion.com/students and sign in.

3. Click "Add Class" at the bottom. Enter the Class Code for this class - SMHQB - and then click "Add Class".
4. Your class will be added to the dropdown menu at the top. You can now click the "Sign In" button to log into your class!
5. You will need to bring an internet-connected device to each class lecture.

Course-related questions should be posted to the course email account, intromm@cs.stonybrook.edu, which is monitored daily by the TA's. You should always use your SBU gmail account for coursework and correspondence. Only for urgent personal/private issues should you email me directly (at anthony.scarlatos@stonybrook.edu). **Please allow between 24-48 hours for an email reply.** All instructor correspondence will be sent to your SBU email account. **Plan on checking your SBU email account and Brightspace daily for course-related messages.** To log in to Stony Brook Google Mail, go to <http://www.stonybrook.edu/mycloud> and sign in with your NetID and password.

Office hours will be conducted using Google Calendar and Google Meet. In order to manage requests for office hours I have instituted the following system. To make an appointment, go to the link below:

<https://calendar.app.google/3yYsqg98qs8NhBvL7>

Choose a time slot (15 minutes each), at least 24 hours before you wish to meet with me. The system will send me an email notification and the meeting will be added to your Google Calendar as an event. The system generates a Google Meet link.

Please note that there are appropriate uses for office hours, and inappropriate ones. Office hours are a good time to get clarification on assignments and seek advice. Grading disputes should be resolved with the grading TA's through the course email.

Suggested Materials

[GIMP](#)

[Inkscape](#)

[Audacity](#)

[Blender](#)

(Adobe Creative Cloud is recommended)

Lynda.com account ([instructions for obtaining a free subscription](#))

Technical Assistance

DoIT provides technical assistance to all students. If you require assistance with hardware or using any supported applications, available support options include:

Visit one of DoIT's [Tech Stations](#)

Access [self-help materials](#)

Submit a ticket online at service.stonybrook.edu

[Chat live](#) with a student consultant

Call 631-632-9800 for assistance (2-9800 from on campus)

If you need assistance with Brightspace, you can access resources from the Brightspace Resources link on Stony Brook Brightspace homepage (<https://brightspace.stonybrook.edu>) or contact the SUNY helpdesk via phone/ticket/live chat at: <https://online.suny.edu/help/>

Need a laptop? You can borrow a laptop from the Melville Library SINC Site. Details can be found at: <https://it.stonybrook.edu/services/student-laptop-loaner-program>

Advisories

Student Accessibility Support Center: If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact the Student Accessibility Support Center, Stony Brook Union Suite 107, (631) 632-6748, or at sasc@stonybrook.edu. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

Have a problem that's impacting your attendance or performance in this class? Contact the **Student Support Team** at <https://www.stonybrook.edu/commcms/studentaffairs/studentsupport/about/index.php> right away! Do not wait until late in the semester to try to resolve any problems you may be having.

Academic Integrity: Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty is required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Professions, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty please refer to the academic judiciary website at http://www.stonybrook.edu/commcms/academic_integrity/index.html

Critical Incident Management: Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Student Conduct and Community Standards any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures. Further information about most academic matters can be found in the Undergraduate Bulletin, the Undergraduate Class Schedule, and the Faculty-Employee Handbook.

Course Evaluation: Each semester Stony Brook University asks students to provide feedback on their courses and instructors through an online course evaluation system. The course evaluation results are used by the individual faculty, department chairs and deans to help the faculty enhance their teaching skills and are used as part of the personnel decision for faculty promotion and tenure. No individually identifiable data are ever reported back to the university or instructor. Students who have completed previous evaluations can view all faculty ratings at: <https://classie-vals.stonybrook.edu/>

Schedule

Assignments are due 1 week after they are assigned, unless otherwise noted. Please note that this schedule is approximate, and subject to change.

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Date	Topic	Assignment Due
Week 1	Class Orientation	
Week 2	What is Multimedia?	HW1
Week 3	Color, Design & Composition	Project Proposal
Week 4	Character Design	Self Portrait
Week 5	Storyboarding	Character Sheet
Week 6	Raster Graphics	Storyboard
Week 7	Vector Graphics	HW2
Week 8	Audio	
Week 9	3D modeling	Audio Track
Week 10	Shading & Lighting	3d Model
Week 11	Animation & Rigging	3d Scene
Week 12	Rendering	Pencil Test
Week 13	Video Editing	
Week 14	Video FX	Final Video

Grading

There are no exams given in this class.

Scoring breakdown:

Project Proposal - 2 points

Blender Training Videos (on Blackboard) - 1 point each, or 8 points total

Self Portrait exercise - 10 points

Character Sheet - 5 points

Storyboard - 10 points

Audio Track - 10 points

3d Character Model - 10 points

3d Scene - 10 points

3d Animation - 10 points

Final Video Project - 10 points

HW - 5 points total
Hall of Fame - 2 points
Multimedia Production Process - 3 points

Class Questions - 10 points
1/2 point for each correctly answered question (20 questions out of 25 total)

1/2 points can be given by the grading TA's for all assignments.

Up to 10 points of extra credit may be offered (TBD)

All assignments are announced on Brightspace (generally a week prior to the due date) and emailed to students.

Scale:

93 - 100+	A
90 - 92	A-
87 - 89	B+
83 - 86	B
80 - 82	B-
77 - 79	C+
73 - 76	C
70 - 72	C-
65 - 69	D+
60 - 64	D
Below 60	F

All due dates are at 11:59 pm on the date given. Homework is due within 24 hours of the due date to receive credit. Project assignment submissions later than 24 hours past the due date will have 1 point per day deducted, and no projects will receive credit after 5 days from the due date. Projects with content that is offensive or defamatory will have points deducted, or may get no credit at all. Plagiarized work will receive no credit, and may be reported to the academic judiciary.

A grade of "I" (incomplete) for the semester is rarely given.

No assignments will be accepted after class has ended on the last day of class for the semester.