

## New York City College of Technology

Entertainment Technology Department  
300 Jay Street, Room V-203 Brooklyn, NY 11201  
(718) 260-5588 <http://www.entertainmenttechnology.org/>



### ENT-2210 Advanced Scenery Construction

Pre-requisites: Scenery Construction (ENT-1110), Entertainment Drafting I (ENT 1108)  
Pre- or Co-Requisite: Theatrical Drafting (ENT 2200)  
Professor: John McCullough  
Office: Room 203, Voorhees Hall, (718) 260-5506  
Email: [jmccullough@citytech.cuny.edu](mailto:jmccullough@citytech.cuny.edu)  
Office Hours: by appointment

### Class Meeting Time:

Mondays and Wednesdays, noon-1:40pm, Room V225

*Learning results from what the student does and thinks and only from what the student does and thinks. The teacher can advance learning only by influencing what the student does to learn. –Herbert A. Simon*

### Course Description:

There is a nationwide shortage of competent carpenters and technical directors in the theatre. Students taking this class will have the opportunity to practice all of the most important skills that can lead to a successful and rewarding career in the field. Even the most complex set is built up from many smaller, simpler parts. Mastering the skills presented in this class will give you a strong foundation in scenery construction that will support your work in the future, no matter how complex it becomes.

### Required Texts:

*Stock Scenery Construction Handbook* by Bill Raoul and Mike Monsos, 3rd edition ISBN: 978-0911747430

*Backstage Handbook* by Paul Carter, 3<sup>rd</sup> Edition. Broadway Press. ISBN: 978-0911747393

*The Complete Manual of Woodworking* by Jackson, Day, Jennings ISBN:0-679-76611-1

### Recommended Reading:

*The Jigs & Fixtures Bible* by DeCristoforo ISBN: 1-55870-563-5

*Jim Tolpin's Table Saw Magic* by Tolpin ISBN: 1-55870-677-1

### Required Equipment:

25' tape measure, safety glasses, pencil, work gloves, appropriate shop attire (will be discussed in class) **NOTE: You are required to bring your equipment to every class meeting!**

### Attendance/Promptness:

Punctuality is one of the most respected virtues in the entertainment business. If you have a reputation for showing up on time, you will always find people willing to trust you and to hire you. Use this class as an opportunity to build the habit of punctuality.

Your attendance will not be graded, however it will be very difficult for you to learn the material if you are not in class. If you must come in late, please be respectful of the class and try not to disturb anyone as you enter.

If you know ahead of time that you will be late or absent, please contact me before the start of class so we can arrange for you to make up material you will be missing.

**Grades:**

Every piece of work you produce (in-class activities, homework, projects) will receive detailed feedback from me, but they WILL NOT BE GRADED. This feedback will indicate the strengths and weaknesses of your work, as well as areas to improve and what skills or concepts you should learn next.

We will determine your final grade together during a grading conference at the end of the semester. You will use your learning portfolio to write a self-assessment of your work and suggest the grade that you think have earned based on your mastery of the concepts and skills introduced in class. We will review your assessment and portfolio together, and come to an agreement about your grade.

Unless otherwise noted, you are free to discuss homework assignments with each other, but you are responsible for doing all of your own work. Any act of academic dishonesty will be handled in accordance with CityTech's policy on Academic Integrity, available at:

[http://www.citytech.cuny.edu/academics/docs/academic\\_integrity\\_policy.pdf](http://www.citytech.cuny.edu/academics/docs/academic_integrity_policy.pdf)

**Learning Outcomes**

<b>After taking this class, the student will be able to...</b>	<b>This will be demonstrated by...</b>
Plan and execute the construction of a complex scenic piece (either a single complicated piece, or the combination of simpler pieces into a cohesive whole)	In-class exercises, Estimate Homeworks
Identify and operate wood- and metal-working tools commonly found in scene shops	Lab Activities
Choose tools and techniques appropriate to a project	Lab Activities, Estimate Projects, In-class exercises
Read and understand drawings (build drawings, ground plans, schematics) [Gen Ed]	Lab Activities, Estimate Projects
Estimate materials, labor and tooling needed to complete a scenery project	In-class exercises, Estimate Projects

Date	Topic		Due	Assigned
8/27	Introductions, Diagnostic Test, Shop Safety, OpenLab, Goals and Expectations			Acquire class materials Homework: OpenLab
8/29	Pneumatic Tools and Fasteners	Flats	OpenLab Account Created Raoul: pp23-118	HW: Hardware Store
9/3	College Closed			
9/5	Table Saw; Measuring and Marking Tools	Stick Lumber	HW: Hardware Store Raoul: pp 238-246 Jackson: pp 10-38	
9/10	No Classes			
9/12	Drills, Drivers, Bits, Screws	Sheet Goods		
9/17				
9/19	No Classes			
9/24	Circ Saw, Chop Saw	Cut Lists		
9/26	Arm Saw, Hinges	Doors and Windows		HW: Flat Estimates
10/1	Moulding	Lab		
10/3	Planer, Mortiser	Joinery	Jackson: pp 215-248 Moulding Lab	
10/8	College Closed			
10/10	Clamps, Biscuit Joiner	Lab	HW: Flat Estimates	
10/15	Lab		Joinery lab (EOC)	
10/17	Bolts, Wrenches	Flats Revisited		
10/22	Corded Drill, Drill Press	Flat Challenge 1		
10/24	Router, Hand Saws	Flat Challenge 2		
10/29	Mid-Semester Check-In and Review		Self-Evaluation	
10/31	Hammers, Demo Tools, Nails	Platforms	Raoul: pp 142-195	
11/5	Grinder, Compressor	Legs and Layout	Raoul: pp 196-223	
11/7	Cold Saw, Concrete Anchors	Stairs and Ramps		
11/12	Casters, Wagon Brakes	Wagons		HW: Platform Estimates
11/14	Jigs	Lab		
11/19	Lab			
11/21	Lab	Jig (EOC)		
11/26	Stage Hardware	Drawings and Organization		
11/28	Abrasive Saw	Planning for a Crew		
12/3	Fabric		HW: Platform Estimates	
12/5	Grommet Lab	Soft Goods	Raoul: pp 119-141	
12/10	Band Saw, Sanding and Filing Tools	3d Scenery		
12/12	Jig Saw, Pliers	Wire and Foam		
12/17	Lab		3d Scenery Lab (EOC)	
12/19	Final Check-In and Review		Final Self-Evaluation	