

SYLLABUS 2019 – 2020



ROCHESTER | NY

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Date	Locations & Descriptions
Thursday, September 12 6:00 pm – 7:00 pm	ACE Mentor Open House - (The Pike Co., 1 Circle Street, Rochester, NY 14607)
Thursday, September 19	Student applications are due
Thursday, September 26	Notification sent to all applicants via email
Thursday, October 3 4:00 pm - 6:00 pm	<p>Meeting #1 – Introduction & Scavenger Hunt – (LeChase Construction, 205 Indigo Creek Drive, Rochester, NY 14626)</p> <ol style="list-style-type: none"> 1. Introduction to ACE Mentorship <ol style="list-style-type: none"> a. Expectations b. Review of syllabus c. Photos & projects from previous years d. Need Shirt and shoe size this day 2. Meet the mentors 3. Scavenger hunt <p>Assignment: Get permission form signed.</p>
Thursday, October 10 4:00 pm - 6:00 pm	<p>Meeting #2 - Understanding Construction Drawings - (Bergmann Associates, 280 E. Broad St #200, Rochester, NY 14604)</p> <ol style="list-style-type: none"> 1. Review a set of construction documents from a medium size project. Locate symbols, find dimensions, determine square footages & materials, etc. <ol style="list-style-type: none"> a. Dimensions b. Scale c. Construction Document Symbols d. What is an elevation e. What is a section f. What is a floor plan g. Available tools to create construction drawings 2. Begin playhouse project <ol style="list-style-type: none"> a. Groups of 6 max – exchange contact info b. Brief presentation on concept/idea/diagram <p>Assignment: Brainstorm a theme/concept for your playhouse. Bring inspiration images.</p>
Thursday, October 17 4:00 pm - 6:00 pm	<p>Meeting #3 – Structural Engineering - (LaBella Associates, 300 State Street, Suite 201, Rochester, NY 14614)</p> <ol style="list-style-type: none"> 1. Structural engineering presentation 2. Carpenter presentation on concrete forming – Brian Kelly <p>Assignment: Decide on your group’s playhouse concept. Begin sketching how this concept can translate into design features in plan, section, elevation or 3D. Use diagrams if helpful.</p>

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Saturday, October 19 8:00 am – 12:00 pm	Meeting #4 - Concrete Footing Competition – (The Pike Co., 1 Circle Street, Rochester, NY 14607) 1. Students will be divided into three teams: LeChase, Pike and Manning Squires
Thursday, October 24 4:00 pm – 6:00 pm	Meeting #5 – Estimating / Lego Project Management Game / Working Class – (The Pike Co., 1 Circle St., Rochester, NY 14607 - Entrance is in back of bldg.) 1. Introduction to project management 2. Work in groups to continue developing playhouse drawings Assignment: Combine everyone’s playhouse ideas into 1 design. Draw all playhouse drawings to scale.
Saturday, October 26 9:00 am – 11:00 am	Meeting #6 – Tour Rochester General Hospital - (RGH, 1425 Portland Ave, Rochester, NY 14621) – Hosted by LeChase
Thursday, November 7 4:00 pm - 7:00 pm	Meeting #7 – Understanding Different Leadership Styles – (Dale Carnegie, 1200A Scottsville Rd #375, Rochester, NY 14624)
Thursday, November 14 4:00 pm -6:00 pm	Meeting #8 - Bid Day Experience - (LeChase Construction, 205 Indigo Creek Drive, Rochester, NY 14626) Simulate the bidding process: 1. Review drawings for a hypothetical project 2. Contact contractors and get quotes 3. Determine total estimated project cost based on qualified low bidders Assignment: Draw all playhouse drawings to scale.
Saturday, November 16 9:00 am – 11:00 am	Meeting #9 – R.I.T. Experience (TBD) 1. Tour RIT Campus
Thursday, November 21 4:00 pm – 6:30 pm	Meeting #10 – Civil Engineering – (Bergmann Associates, 280 E. Broad St #200, Rochester, NY 14604) 1. Overview of civil engineering types 2. Specific project examples and job expectations 3. Hands on activities including pipeline design and storm weather modeling Assignment: Finalize Floor Plan for Playhouse
Thursday, December 5 4:00 pm - 6:30 pm	Meeting #11 – 3D Printing and Virtual Reality Program (The Pike Co., 1 Circle St, Rochester, NY 14607) 1. Overview of Revit and BIM 2. Hands on activities including Revit modeling, HD Laser scanning, 3D Printing Assignment: Finalize Elevation for Playhouse

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Thursday, December 12 4:00 pm – 6:30 pm	Meeting #12 – Principles and Elements of Interior Design – (Bergmann Associates, 280 E. Broad St #200, Rochester, NY 14604) <ol style="list-style-type: none"> 1. Hands on activities including application of various finishes to residential space Assignment: Add Dimensions to Playhouse Design
Saturday, December 14 8:00 am – 12:00 pm	Meeting #13 – Metal Stud Framing Experience – (Davis Fetch, 175 Dodge St, Rochester, NY 14606) <ol style="list-style-type: none"> 1. Construct three metal stud rooms and drywall installation.
Thursday, December 19 4:00 pm – 6:30 pm	Meeting #14 – Playhouse Working Class – Finish Playhouse Design - (LaBella Associates, 300 State Street Suite 201, Rochester, NY 14614) <ol style="list-style-type: none"> 1. Present playhouse drawings to the group 2. Utilize time with Mentors to make sure dimensions are correct & materials are labeled. 3. Playhouse drawings DUE at end of class
Thursday, January 9 4:00 pm - 7:00 pm	Meeting #15 – Playhouse Construction Day 1 – Build Day - (Pike, 1 Circle St., Rochester, NY 14607)
Thursday, January 16 4:00 pm - 7:00 pm	Meeting #16 – Playhouse Construction Day 2 –Build Day - (Pike, 1 Circle St., Rochester, NY 14607)
Thursday, January 23 4:00 pm - 7:00 pm	Meeting #17 – Playhouse Construction Day 3 – Build Day - (Pike, 1 Circle St., Rochester, NY 14607)
Thursday, January 30 4:00 pm – 7:00 pm	Meeting #18 – Playhouse Construction Day 4 – Build Day - (Pike, 1 Circle St., Rochester, NY 14607)
Saturday, February 1 9:00 am – 12:00 pm	Meeting #19 - Playhouse Construction Day 5 - Final Build Day Assignment: 1500SF house project assigned. Begin working on floor plan concepts.
Thursday, February 6 4:00 pm – 6:00 pm	Meeting #20 – Mechanical Engineering and Plumbing Experience – (Postler & Jaeckle Mechanical Corporation, 615 South Ave, Rochester, NY 14620) <ol style="list-style-type: none"> 1. Reading mechanical drawings 2. Group exam on mechanical drawings 3. Plumbing tools and how they are used Assignment: Continue working on floor plan concepts.

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Saturday, February 8 8:00 am – 12:00 pm	Meeting #21 – Field Experience for Plumbing - Local 13 Plumbers & Pipefitters Training Center, 1850 Mt Read Blvd, Rochester, NY 14615
Thursday, February 13 4:00 pm – 6:30 pm	<p>Meeting #22 – 1500SF House Design Working Class – (LaBella Associates, 300 State Street Suite 201, Rochester, NY 14614)</p> <ol style="list-style-type: none"> 1. Present house designs to the group / receive feedback 2. Work with mentors on 3D model, plans, sections, elevations, etc. <p>Assignment: Choose site for 1500SF house and continue developing floor plans. Draw site diagrams showing how the house is situated on the site.</p>
Thursday, February 27 4:00 pm – 6:00 pm	<p>Meeting #23 – Roofing & Painting – (Upstate Roofing & Painting, 1300 County Rd 85, Rochester, NY 14623)</p> <p>Assignment: Develop house floor plans and elevations</p>
Thursday, March 5 4:00 pm – 6:30 pm	<p>Meeting #24 – Marketing – (The Pike Company, 1 Circle Street, Rochester, NY 14607)</p> <ol style="list-style-type: none"> 1. Review RFP Process 2. Utilize PowerPoint for Graduation Board <p>Assignment: Finalize all house drawings and add materials</p>
Saturday, March 7 8:00 am – 12:00 pm	<p>Meeting #25 – Electrical Training – (IBEW Local 86, 2300 E River Rd, Rochester, NY 14623)</p> <ol style="list-style-type: none"> 1. Reading electrical drawings 2. Understanding electrical hand tools and how they are used
Thursday, March 12 4:00 pm – 6:30 pm	<p>Meeting #26 – Working Class – (LaBella Associates, 300 State Street Suite 201, Rochester, NY 14614)</p> <p>Assignment – Finalize all drawings and materials and lay out presentation boards.</p>
Saturday, March 14 9:00 am – 11:00 am	Meeting #27 – Project Tour – (TBD)
Thursday, March 19 4:00 pm – 6:00 pm	<p>Meeting #28 – Presentation Skills - (SWBR Architects, 387 East Main Street Suite 500, Rochester, NY 14604)</p> <ol style="list-style-type: none"> 1. Dry run of presentations with critique by David Beinetti <p>Assignment: Make note cards (optional), practice, practice, practice!</p> <p style="text-align: center;">FINAL HOUSE DESIGNS ARE DUE</p>

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ACE MENTOR PROGRAM
ARCHITECTURE • CONSTRUCTION • ENGINEERING

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Friday, March 27
4:00pm - 7:00pm

FINAL PRESENTATIONS / GRADUATION **(RIT – Location TBD)**

- **Silent auction, hors d'oeuvres, networking**
- **Student presentations**
- **Presentation of graduation certificates and scholarships**