

THREE RIVERS COMMUNITY COLLEGE  
**CONSTRUCTION ESTIMATING**  
 Spring Semester 2016, Monday 6:30pm - 9:15pm

**Instructor:** Nate Bernier LEED AP, (860) 874-6389, email [bnate@hotmail.com](mailto:bnate@hotmail.com);  
[nbernier@standardbuilders.com](mailto:nbernier@standardbuilders.com);

**Grade:** Quizzes (3) 45% Home Work Assignments 30% Final 25%

**Course Objectives:**

- Be able to understand the role of the estimator depending on the various delivery system
- Be able to read, interpret, and understand construction documents and specifications
- Be able to prepare a conceptual estimate
- Be able to estimate building costs by assemblies
- Be able to analyze construction productivity
- Be able to understand selected aspects of the bidding and post bid process
- Be able to apply estimating skills and understand their integration into computer spreadsheet applications
- Be able to understand basic scheduling concepts
- Be able to identify abstract direct costs and account for the those conditions accordingly

**Method:** Lectures, Slide Presentations, Simulations / Class Work Sessions, Class Discussion

**Text:** RS Means for Students, Instructor Handouts

Week 1 – 1/25/2016 *	<b>Course Introduction</b>	Why Estimate?, Review Math Basics
Week 2 – 2/1/2016 *	<b>Estimating Concepts</b>	Role of Estimator, Estimate Types & Uses
Week 3 – 2/8/2016 *	<b>Starting The Estimate</b>	Document Review, Estimate Organization: CSI Format
<b>Week 4 – 2/15/2016</b>	<b>Presidents Day – No Classes</b>	
Week 5 – 2/22/2016 *	<b>Quantity Take-off &amp; Pricing</b>	Divisions 2 - 5
Week 6 – 2/29/2016 *	<b>Quantity Take-off &amp; Pricing (Cont'd)</b>	Divisions 6 – 10
Week 7 – 3/7/2016 *	<b>Quantity Take-off &amp; Pricing (Cont'd)</b>	Divisions 11 – 16
Week 8 – 3/14/2016 *	<b>Identifying &amp; Pricing Implied Scope</b>	Logistics, site specific conditions, weather considerations
<b>Week 9 – 3/21/2016</b>	<b>Spring Break – No Classes</b>	
Week 10 – 3/28/2016 *	<b>Scheduling (determining GCs/GRs)</b>	Identifying Critical Path, Milestones, Pricing Division 1: General Conditions & General Requirements
Week 11 – 4/4/2016 *	<b>Project Contingencies &amp; Risk Management</b>	Allowances, Using Qualifications, Proper Use of RFIs
Week 12 – 4/11/2016 *	<b>Instructor Away – Class Assignment</b>	QTO and pricing of a project: TBD
Week 13 – 4/18/2016 *	<b>Delivery Systems – Impact on Estimate</b>	Lump Sum, GMP, Joint Venture, IPD
Week 14 – 4/25/2016 *	<b>Managing a Bid (Pre &amp; Post Submission)</b>	Bid Leveling, Strategy, Scope Review, Value Management
Week 15 – 5/2/2016 *	<b>Internal &amp; External Customers / Team Dynamics</b>	Estimate Submission, Estimate Transfer & Tracking
Week 16 – 5/16/2016 *	<b>Final Exam</b>	Good Luck!

\* Subject to Change

COURSE MATERIALS REQUIREMENTS:

Notebook

Students should assemble a notebook, to be made up of handouts distributed during class. A 3” “*Slant-ring*” binder with divider tabs (16 or so) is recommended – this will be a good resource for future reference.

Calculator; ¼” Graph Paper, Architectural Scale

A basic scientific calculator will be used during class, quizzes and for assignments. Graph paper can be invaluable for sketching sample assemblies and layouts.

Computer Access; Internet Access; Email; USB Thumb Drive

Access to a computer with a spreadsheet application (such as Microsoft XL) will be needed for estimating exercises; internet access will be helpful for collecting data and an email account will be needed for class communication and distribution of materials. TRCC library or a Public Library can provide computer access and free email accounts are readily available.