ARCT 241 Construction Estimating II
3 Credits

Course Description

This course covers manual and computer assisted estimating procedures. Several light commercial and multi-family buildings will be estimated. Labor costs will be included with several of the projects. The study of metal building terminology and the Butler Advantage software is also covered. (Prerequisites: ARCT144)

Course Objectives

The following list of course goals will be addressed in the course.

1. Explain the estimating process for private and public bidding practices.
2. Perform various written communications related to construction estimating.
3. Demonstrate estimating residential building materials accurately and proficiently.
4. Apply various estimating techniques to calculate labor costs for residential construction.
5. Demonstrate estimating labor for residential construction accurately and proficiently.
6. Create and utilize spreadsheets for construction estimating.
7. Organize and summarize estimates into the final bid documents.
8. Utilize On-Screen Take-off (OST) estimating software for construction estimating.
9. Identify Pre-Engineered metal building components.
10. Estimate Pre-engineered Metal Building Structures

Required Text
NDSCS Architectural Drafting & Estimating Dept. ESTIMATING MANUAL (from ARCT 144 course)
- ARCHITECT'S SCALE
- ENGINEER'S SCALE
- LAPTOP COMPUTER / CALCULATOR
- PRINTER AND SCANNER
- MICROSOFT WORD AND EXCEL
- COLORED PENCILS, HIGHLIGHTERS
- CONSTRUCTION WORKING DRAWINGS (provided by the instructor)
- CONSTRUCTION SPECIFICATIONS (provided by the instructor)

The text can be purchased from the NDSCS Bookstore at www.ndscsbookstore.com.

Contact Coleen at the NDSCS Bookstore for the most current textbook information (1-800-342-4325, ext. 2239 or coleen.thoe@ndscs.edu). You may also visit the NDSCS Bookstore web site at www.ndscsbookstore.com and search for book information by class by clicking the "Textbook" tab.

Course Policies and Procedures

Access Policy: Computer Failures and Viruses

Online students must maintain computer access at all times to the online course. Lack of computer access as an excuse for late work or missed exam/quiz will NOT be accepted. Review the Computer Access Policy to learn how you can take a proactive approach to your online success.

Student Attendance

Regular attendance and completion of all assignments, on time and as scheduled, is important to your success in this course. An online student who does not regularly attend their online class for a period of seven consecutive days may be dropped from the course. Attendance is evidenced by weekly completion of assignments and/or participation in online discussions. Efforts to contact inactive students are attempted as soon as each semester begins; however, if there is no response from the student and inactivity continues, a drop will be enacted. See the entire NDSCS Attendance Policy at www.ndscs.edu/online-attendance.

If your instructor is unexpectedly unavailable and may be delayed in reviewing or correcting assignments, you will be notified of this as a sign of courtesy and respect.

ONLINE STUDENT PARTICIPATION AND CONDUCT GUIDELINES

The practices of courtesy and respect that apply in the traditional classroom also apply online. However, the expectations and practice differ in the online classroom to greater extent. Review the Online Student Participation and Conduct Guidelines (**Appendix A**) to learn of these expectations.

Assignments

Assignments are given in the course for completion in your textbook as well as other appropriate projects. Please follow the order of chapter completion as presented in the Schedule under the Course Navigation Area of Course Home.

Assignments within each unit are due within the time frame listed in the Class Schedule. Assignments not completed by the specified deadline may have 10% of the grade deducted per day or 0 entered into the gradebook.

If you send your assignments as an attachment through the online Course Dropbox, always convert it to a PDF document. Anything else but that format will NOT be accepted (unless noted otherwise by the instructor).

There is free software for converting documents to PDFs. You can use www.downloads.com to search for software as it is a trusted site and chances of finding software that is not malicious is greater. Microsoft Office 2013 products and beyond have the capability to save the document as a pdf (just go to File, Save As…, and choose PDF in the dropdown menu).

Online Chat & Threaded Discussions

Participation in threaded discussions ARE REQUIRED. When a threaded discussion is posted you will have a specific time period in which to participate. Make sure to make a posting relevant to the discussion topic - and then respond to other students. Discussions will be closed on a specific date, so make sure to participate in the discussion before it closes.

Points will be earned in the gradebook for your participation in the assigned discussions. Points will be assigned using the following method and may be computed on a combination of columns 1 through 3 (point value may be different):

(BEST)	Pts	(GOOD)	Pts	(MINIMUM)	Pts
You respond with an opinion or information pertinent to the topic. Use two or more complete sentences.	5 max	You respond with an opinion or information that is pertinent to the topic but in only one sentence.	3 max	You respond with an opinion or information not pertinent to the topic.	2 max
You not only post your thoughts, but also post reaction to another student as described above.	3 max	You post reaction to another student - but not as described.	1 max	You do not post your reaction to another student as described.	0 max
0 spelling or grammar errors	2 max	1 spelling or grammar errors	1 max	2 or more spelling or grammar errors	0 max
Total Possible Points Rubric #1	10 max	*Total Possible Points Rubric #2*	5 max	*Total Possible Points Rubric #3*	2 max

| #1 | #2 | #3 |

Submitting Assignments

All assignments should be turned in via **Dropbox** unless otherwise specified. You are strongly encouraged to make hard copies of your assignments and communications with the instructor to avoid losing data in the case of technical issues. *At the first sign* of problems, contact your Internet Service Provider (ISP) immediately.

It is your responsibility to access the class on another computer in the event of hardware or software problems. If your problems are not cleared up within 12 hours, contact your instructor to make other arrangements.

Quizzes and exams

Online quizzes and exams are a part of this class to assess your progress and whether you have met the course objectives.

Academic integrity is important to NDSCS, your instructor, and you, the student. In order to ensure academic integrity of the online quizzes and exams a "Proctor" will be used at times. A proctor is simply a reputable person that assures me that only the allowed reference materials were used on an assignment. The proctor form includes a short list of individuals that could be a proctor - but if you have any problems locating an appropriate proctor - contact your instructor and they will help you.

The proctor form will be found in "Doc Sharing" within the online course. You will need to download, review, print off, and complete an Exam Proctor Form.

The Exam Proctor Form must be completed and returned to the instructor within 10 calendar days via Dropbox from within the course. If the Proctor Form is not received within 10 days, 10% will be deducted from quizzes/exams taken until the Proctor Form is received.

Not all quizzes and exams will require a proctor. If a proctor is required - this will be made clear to you as early as feasible. If there is ever any question regarding the need for a proctor - contact your instructor as soon as possible.

Student-Instructor Communications

The primary means of communication from your instructor to you will not be just the content of this online class, but will consist of frequent e-mail messages. In order to receive these communications, you must have a current e-mail account and check it on a frequent basis ... at least EVERY OTHER DAY. Your instructor will not be responsible for e-mailed communications not received or returned by your e-mail account. Announcements may also be posted on the Course Home Page - so please check for announcements.

While online material is available 24 hours a day and offers greater flexibility for the student and instructor, keep in mind that your instructor will not be available 24 hours a day. Your instructor will be checking e-mail and voice mail messages on a regular basis, but there may be times when they are unavailable due to other commitments and other teaching responsibilities. Your questions will be responded to as soon as time allows.

Student E-Mail Accounts

NDSCS students are to use an NDSCS email account exclusively to ensure the lines of communication with your instructor and NDSCS are not broken, which often happens with other email providers. You can access your email account by following instructions at www.ndscs.edu/It-Setup.

The NDSCS e-mail system provides students with an entire suite of services such as:
* 10 gigabytes of file storage
* web-based Microsoft Office products
* instant messaging, and more

To make your NDSCS email account your preferred email address, log into your CampusConnection account and check the **"preferred"** box by campus email. If you are unable to update the "preferred" email status in CampusConnection, Distance Education can do that for you. If you need help accessing your NDSCS email, contact the NDSCS IT Service Desk at 800-342-4325 ext 3-3333 or ndscs.servicedesk@ndscs.edu.

Another tip is if you use a different email OTHER THAN THE NDSCS ACCOUNT, you may want to choose for forward the NDSCS email to your account. That way, you will still get emails that are sent.

Technical Problems and Assignment Delivery

You are strongly encouraged to make hard (printed) copies of your assignments and communications with your instructor. Computer crashes and disasters are bound to happen. Keep in mind, however, that internet-service provider (ISP) problems are not viewed as an excuse for turning your work in late. *At the first sign* of problems, contact your ISP immediately.

It is a good idea to have a "backup plan" in place for those times when a problem occurs. Locate a place that you can access if your connection fails - possibly a friend's home, a library or a school may be suitable. Also - try not to procrastinate ... that way, when problems do occur, you will still have time to implement your backup plan.

NOTE: It is your responsibility to access the class on another computer in the event of hardware or software problems. If your problems are not cleared up within 12 hours, CONTACT your instructor either by phone or e-mail, to make other arrangements

You may notify your instructor if you are experiencing technical difficulties that may affect completion and submission of your assignments.

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NDSCS students are to use an NDSCS email account exclusively to ensure the lines of communication with your instructor and NDSCS are not broken, which often happens with other email providers. You can access your email account by following instructions at www.ndscs.edu/It-Setup. If you need help accessing your NDSCS email, contact the NDSCS IT Service Desk at 800-342-4325 ext 3333 or ndscs.servicedesk@ndscs.edu.

To make your NDSCS email account your preferred email address, log into your CampusConnection account and check the "preferred" box by campus email.

The NDSCS e-mail system provides students with an entire suite of services such as:

- 10 GB storage for email
- Instant messaging through Skype for Business
- Rich calendaring
- Photo sharing
- Multi-browser support
- SMS alerts to mobile phones

Grading Policies

Grading Scale

Letter grades will be awarded as follows:

LETTER GRADE	PERCENT
A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	Below 60%

Grades for this course will be a cumulative grade consisting of homework, quizzes and a comprehensive final test.

Academic Integrity

Integrity is an NDSCS core value and there is an expectation that all students, as members of the college community, adhere to the highest levels of academic integrity.

Dishonesty in class, laboratory, shop work or tests is regarded as a serious offense and is subject to disciplinary action by the instructor and dean of the respective division. For more information, refer to the NDSCS Student Planner or College Catalog under College Policies and Basic Regulations of Conduct (page 32).

Disabilities and Special Needs

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and the **Student Accessibility Coordinator** (phone 671-2623, or toll-free 1-800-342-4325 ext. 3-2623) as early as possible in the term.

ONLINE STUDENT PARTICIPATION AND CONDUCT GUIDELINES

The practices of courtesy and respect that apply in the traditional classroom also apply online. However, the expectations and practice differ in the online classroom to greater extent. Review the Online Student Participation and Conduct Guidelines (**Appendix A**) to learn of these expectations.

All students are expected to adhere to accepted codes of ethical, personal, and civil conduct when conversing online, using e-mail, or engaging in any chat sessions or threaded discussions. Failure to abide by such codes of conduct and etiquette may result in the instructor asking you to withdraw from the class and assignment of a failing grade. This is not typically a problem - but if you see a problem, please contact your instructor as soon as possible so that it can be cleared up.

APPENDIX A
ONLINE STUDENT PARTICIPATION AND CONDUCT GUIDELINES

Online courses are based on the premise that students learn best in a community. The instructor plays an important role, but this is a different role than most instructors play in the traditional, face-to-face classroom. While you may see a shift in the way classes work, you'll also notice that some things don't change: the practices of courtesy and respect that apply in the ordinary classroom also apply online, and may actually require more attention in this venue. Here are some guidelines:

1. **Get involved**. In the online environment, it's not enough to show up! Your voice must be heard in order to show your presence. Your comments are needed to add to the information, the shared learning, and the sense of community in each class.

2. **Be persistent**. Remember that for many this is a fairly new environment. Each instructor still sets the rules, and you need to abide by them; however, if you run into any difficulties, don't wait! Send your instructor an email immediately or post in the Discussion Area. Most problems are easily solved, but your instructor and your fellow students need to hear from you before they can help.

3. **Share tips, helps, and questions**. For many, taking online courses is a new experience. There are no dumb questions, and even if you think your solution is obvious, please share it by posting it in the Discussion Area. For every student who asks a question, there are 10 others wanting to know the same thing.

4. **Think before you push the Send button**. Did you say just what you meant? How will the person on the other end read the words? While you can't anticipate all reactions, do read over what you've written before you send it.

5. **Consider the context**. Remember that we can't see the grin on your face when you make a sarcastic comment, we can't see the concern on your face if you only say a couple of words, and we can't read your mind and fill in the gaps if you abbreviate your comments. So: help us "see" you by explaining your ideas fully.

6. **Ask for feedback**. Not sure how your ideas and comments will be taken? Remember there's a person on the other side. If you disagree with what someone has said, practice all your communication skills as you express that disagreement. "Flaming," or flying off the handle and ranting at someone is unacceptable; it is the equivalent of having a tantrum, something most of us wouldn't do in an onsite, face to face classroom.

7. **Act with respect**. Any discriminatory, derogatory or inappropriate comments are unacceptable and subject to the same disciplinary action that they would receive if they occurred in the face to face classroom. If you have concerns about something that has been said, please contact your instructor.

8. **Exercise integrity**. Plagiarism, cheating, and other violations of ethical student behavior are serious actions in a learning community. See Academic Integrity Policy in the course syllabus.

9. **Recognize the consequences**. Consequences of online student behavior that contradicts the NDSCS Academic Integrity policy will be addressed on an individual basis and in accordance with NDSCS Academic Integrity policy. Refer to the NDSCS Student Planner or College Catalog for more information.

*Adapted with permission from Dr. C. A. Keller, San Antonio College