

# ELECTRICAL SYSTEMS

BCN 4723/5729

3 CREDITS

FALL 2018

MONDAY, WEDNESDAY & THURSDAY 6<sup>TH</sup> PERIOD – ROOM 210 RINKER HALL

**INSTRUCTOR:** *Dr. Walters*

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*352-354-2896*

**OFFICE HOURS:** Monday & Wednesday 4<sup>th</sup> period for walk in, other times by appointment

**COURSE WEBSITE:** <http://elearning.ufl.edu>

**COURSE COMMUNICATIONS:** Please use Canvas email.

**COURSE DESCRIPTION:** Theory and practice of design-build contract delivery method. Includes an explanation of the history of design-build, the advantages and disadvantages of design-build as a delivery method and a thorough analysis of the major components of design and construction.

**COURSE GOALS AND/OR OBJECTIVES:** *By the end of this course, students will:*

1. Understand the principles of design-build project deliver including teaming considerations, buying design-build services, solicitation, developing conceptual costs, and managing the design-build process.
2. Analyze design-build risk management topics including basic legal concepts, risk allocation, liability, subcontracts, insurance/bonding, and standard form contracts.
3. Manage post-award design-build tasks including the design-value, design-cost, design-construct, and design-performance interface.
4. Analyze and understand an owner generated RFQ for Design-Build Services

5. Analyze and understand an owner generated RFP for Design-Build Services
6. Demonstrate the principles of giving an effective oral presentation as a team
7. Understand the differences between the design-build delivery method and traditional design-bid-build methods

**TEACHING PHILOSOPHY:** The course is delivered through a combination of lectures and group assignments. The material will cover the fundamentals of Design-Build followed by the requirements to assemble a successful team to an owner's request for qualifications and design-build proposals. This is followed by learning how to successfully manage post award activities and to understand the legal requirements through case studies.

## COURSE POLICIES:

**ATTENDANCE POLICY:** Students are expected to attend every class session and make up all work missed because of legitimate absences. Unexcused or unexplained absences will automatically lower a student's grade if they exceed the equivalent of one week's worth of class time.

An assignment missed when there was prior notification about the absence can be made up if this assignment is taken within the next two University class days. That is, if an assignment is missed on a Friday, it must be made up on the following Monday or Tuesday. For the first assignment made up in this way, full credit can be earned on the assignment. If a second assignment is made up in this way, only 80% of the grade on that assignment will be possible. For the third assignment, the percentage drops again to 60%, and so on.

**COURSE MATERIAL:** The course schedule and material are posted on the course website ([elearning.ufl.edu](http://elearning.ufl.edu)). I do update the website as needed with schedule changes and postings of solutions to the course assignments.

## UF POLICIES:

**UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES:** Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not

retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

**UNIVERSITY POLICY ON ACADEMIC MISCONDUCT:** Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at <http://www.dso.ufl.edu/students.php>.

**NETIQUETTE: COMMUNICATION COURTESY:** All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. [Describe what is expected and what will occur as a result of improper behavior]

<http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf>

## GETTING HELP:

For issues with technical difficulties for E-learning, please contact the UF Help Desk at:

- [Learning-support@ufl.edu](mailto:Learning-support@ufl.edu)
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources are available at <http://www.distance.ufl.edu/getting-help> for:

- Counseling and Wellness resources
- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support

## GRADING POLICIES:

Assignment	Points or percentage
Homework	10%
Exams	60%
RFQ Response	10%
RFP Response	10%
Presentation	10%

## GRADING SCALE:

Grade Values for Conversion May 11, 2009 and After												
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E, I, NG, S-U, WF
Grade Points	4.0	3.67	3.33	3.00	2.67	2.33	2.00	1.67	1.33	1.00	.67	0.00

## COURSE SCHEDULE:

**FINAL EXAM:** *Dec. 10, 3 – 5 PM, RNK 140*

<i>Date</i>		<i>Topic</i>
<b>22-Aug</b>	W	History of Design Build
<b>23-Aug</b>	Th	Essential Concepts of Design-Build
<b>27-Aug</b>	M	Making the Mental Shift to Design-Build
<b>29-Aug</b>	W	Teaming Considerations
<b>30-Aug</b>	Th	Buying Design-Build Services
<b>3-Sep</b>	M	Labor Day
<b>5-Sep</b>	W	Design-Build Solicitation
<b>6-Sep</b>	Th	Getting Ready to Compete
<b>10-Sep</b>	M	Developing Conceptual Costs
<b>12-Sep</b>	W	RFQ issued
<b>13-Sep</b>	Th	Managing the Design-Build Process
<b>17-Sep</b>	M	Exam 1
<b>19-Sep</b>	W	Post Award Definition
<b>20-Sep</b>	Th	Teaming and Communications
<b>24-Sep</b>	M	RFQ Project
<b>26-Sep</b>	W	RFQ Project Due
<b>27-Sep</b>	Th	Roles and Interfaces
<b>1-Oct</b>	M	Managing the Design Value Interface
<b>3-Oct</b>	W	RFP issued
<b>4-Oct</b>	Th	RFP Examples
<b>8-Oct</b>	M	RFP Examples
<b>10-Oct</b>	W	Managing the Design Cost Interface
<b>11-Oct</b>	Th	Managing the Design Construct Interface
<b>15-Oct</b>	M	Managing the Design Performance Interface
<b>17-Oct</b>	W	RFP
<b>18-Oct</b>	Th	RFP
<b>22-Oct</b>	M	RFP Due
<b>24-Oct</b>	W	Exam 2
<b>25-Oct</b>	Th	Basic Legal Principles
<b>29-Oct</b>	M	Principles of Risk Allocation
<b>31-Oct</b>	W	Delivery Systems: Evaluating the Liability
<b>1-Nov</b>	Th	Variations in the Design-Build Teams & Teaming Agreements
<b>5-Nov</b>	M	Procuring the Design Builder/Standard Form Contracts

<b>7-Nov</b>	W	Presentation Planning/Variations in Design-Build Teams & Teaming Agreements
<b>8-Nov</b>	Th	Presentation Preparations - Submit deliverable #1
<b>12-Nov</b>	M	Veterans Day
<b>14-Nov</b>	W	Presentations
<b>15-Nov</b>	Th	Presentations
<b>19-Nov</b>	M	Presentations
<b>21-Nov</b>	W	Thanksgiving
<b>22-Nov</b>	Th	Thanksgiving
<b>26-Nov</b>	M	Contract Issues: Owner and Design Builder
<b>28-Nov</b>	W	Subcontracts
<b>29-Nov</b>	Th	Insurance & Bonding the Design-Build Project
<b>3-Dec</b>	M	Key Liability Issues in Design-Build
<b>5-Dec</b>	W	Exam 3

Please check with the course website for schedule changes.

Disclaimer: This syllabus represents my current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.