

Course Instructor:

Dr. Anthony Winchester Office: Olin 209

Email: agwinche@bsc.edu Office Hours

Monday and Wednesdays 2:00 pm-4:30 pm via Virtual Zoom

(or email for an appointment)

I enjoy jogging, traveling, and I am a light gamer. While in college, I became a math tutor, from there I began instructing people in math and engineering courses. One of my positions was a math instructor in the Engineering Academy at G.W. Carver High School. I earned my PhD in Computer Engineering from the University of Alabama at Birmingham; I was under the advisement of Dr. Murat Tanik.

Course Description:

An introduction to Electrical Networks. This course provides basic circuit analysis that complements micro-controllers and other electronic applications.

Major Course Activities

- Four simulation projects will be given throughout the semester. Students will then confirm the problem by working the simulation by hand.
- Weekly reading assignments will be given.
- A comprehensive exam will be given for the end of the semester.

Course Delivery Description:

This course will meet in person in Olin 201 T&Th 2:00 - 3:20. Attendance is highly encouraged. Most class sessions will include practice problems with the content, and students will have opportunities to ask for assistance on projects. Please inform the instructor if you are unable to attend.

Course Prerequisites:

320 Architecture and Internet of Things

Required Course Materials:

Textbook: Basic Engineering Circuit Analysis (11th Edition)

Technology Requirements:

All course materials and assignments will be posted on Moodle. Please ensure you have Eclipse installed on your personal machine. Eclipse is installed on the lab computers.

It is expected all written assignments be saved and submitted on Moodle as a PDF.

[IT Helpdesk](#) offers telephone, email, and in-person support to all Birmingham-Southern students and employees. Please view the [Student Quick Guide](#) for information on how to access BSC technology tools. Hours of operation are listed below.

Hours of Operation

Email: helpdesk@bsc.edu, Monday-Friday, 7:30 a.m.- 4 p.m.

Phone: [205-226-3033](tel:205-226-3033)

24/7 Hotline via Apogee: 1-877-478-8861

Web address: www.bsc.edu/campus/it/helpdesk.html

Student Learning Outcomes (SLOs):

At the conclusion of this project, students will be able to:

SLO-1 Apply knowledge of mathematics, science, and engineering to a circuit network.

SLO-2 Identify, formulate, and solve problems related to voltage, current and passive elements.

SLO-3 Use modern engineering Techniques and skills to understand electrical circuitry.

SLO-4 Work in groups that will prepare students for professional collaborations.

Instructional Method and Learning Strategies:

The course will consist of lectures followed by hands-on activities to practice what was discussed in the lecture. There will be readings, quizzes on the readings, and discussions about the readings. There will be weekly labs and a final project. The primary teaching style utilized will be active learning. There will be group work, independent research, problem-solving activities, and analytical writings throughout the course.

Course Outline/Schedule:

The final course outline/schedule will be posted in Moodle, but the below is a tentative schedule. The readings will consist of articles or other online material.

Date/Week	Topics	Important Dates/Activities
8/24-8/28 Week 1	Course Introduction: Lecture Chapter 1 Lecture: Chapter 2	Purchase the Textbook
8/31-9/4 Week 2	Problem Session: Chapters 1 and 2	Reading Assignment 1: Read Textbook Chapter 1 Reading Assignment 2: Read Textbook Chapter 2
9/7-9/11 Week 3	Quiz #1: Chapters 1 and 2 Problem Session: Chapters 1 and 2	No Problems Having Controlled Sources
9/14-9/18 Week 4	Quiz #2: Chapters 1 and 2 Lecture: Chapter 3	All Problems Having Controlled Sources Reading Assignment 3: Read Textbook Chapter 3
9/21-9/25 Week 5	Problem Sessions: Chapter 3	
9/28-10/2 Week 6	Quiz #3: Chapter 3 Problem Sessions: Chapter 3	10/1 – Project #2 Due
10/5 – 10/9 Week 7	Quiz #4: Chapter 3 Lecture: Chapter 4	All Problems Having Controlled Sources 10/9 – Last day to drop with a “W” Reading Assignment 4: Read Textbook Chapter 4 Essay 1
10/12-10/16 Week 8	Problem Session: Sections Chapter 4 Quiz #5: Chapter 4	10/15 – Project #3 Assigned
10/19-10/23 Week 9	Lecture Sessions 4 and 5 Lecture: Chapter 7	10/22 – Project #3 Due Reading Assignment 5: Read Textbook Chapter 7

Date/Week	Topics	Important Dates/Activities
10/26-10/30 Week 10	Lecture #6: Chapter 7 Problem Session: Chapter 7	
11/2-11/6 Week 11	Quiz #6: Chapter 7 Lecture: Chapter 9	11/5 – Project #4 Assigned Reading Assignment 6: Read Textbook Chapter 9
11/9-11/13 Week 12	Problem Session: Chapter 9 Quiz #7: Chapter 9	11/12 – Project #4 Due
11/16-11/20 Week 13	Problem Session Q&A for Final	11/17 – Essay 2
11/23 – 11/27 Week 14	11/24 – Reading Day 11/26 – Thanksgiving Break (no class)	
11/30 - 12/4 Week 15	Finals Week	12/1 - Final Exam

Course Activities, Assessments, & Interactions:

This course consists of a sequence of activities, assessments, and interactions to support you in achieving the Student Learning Outcomes (SLO) for this course. You will engage in weekly activities, discussions, research, readings, quizzes, simulation projects, quizzes, and a final Exam. The primary course artifacts required to achieve the Student Learning Outcomes (SLO) are described below:

Discussions

Active participation is required for this course. There will be regular discussions regarding the readings. There may also be reading quizzes or reflections posted on Moodle.

Participation

Throughout the course, there will be worksheets distributed during class for students to solidify their understanding of lectures or expand upon what was covered in the lecture. If students are not in class, they are unable to participate.

Grading:

ACTIVITY	Weight
Reading Quizzes / Simulation Projects Assignments	50%
Homework Assignments	10%
Research Essays	20%
Final Exam	20%

Grading Scale

A	93-100%	B-	80-82%	D+	68-69%
A-	90-92%	C+	78-79%	D	60-67%
B+	88-89%	C	73-77%	F	0-59%
B	83-87%	C-	70-72%		

Getting Started with this Course:

Moodle Learning Management System

Students are responsible for checking Moodle for course readings, assignments, and announcements. Work that is passed in late because of not checking Moodle is the responsibility of the student. You are also required to check your grades on Moodle to verify that the correct grades are recorded for your completed work.

Logging into Moodle

Birmingham-Southern College uses the Moodle Learning Management System (LMS). To get started with the course, do the following:

1. Log onto the BSC access point by going to: moodle.bsc.edu.
2. Enter your BSC username and password.

3. The Moodle dashboard will open, and your courses will be displayed in the middle of the screen.
4. Select your course to begin.
5. The course welcome page will open. Read the welcome section and follow the instructions for getting started.

You will need your BSC User Name and Password to log in to the course. If you do not have or don't know your User Name, contact the IT Help Desk at [205-226-3039](tel:205-226-3039) or helpdesk@bsc.edu.

Course & College Policies:

Attendance

Plan to attend class. If you must miss, please refer to Moodle for any missed work.

Assignments

Assignments will be due as posted on Moodle. All instructions regarding submission format will be on Moodle. Assignments not following the protocol stated on Moodle will not be graded. Late submissions will be penalized 5% per day and will not be accepted more than 3 days late.

Academic Integrity

Adhere to the honor code at all times: As a member of the student body of Birmingham-Southern College, I recognize my responsibility to the traditions of the institution, to my fellow students and to myself. I recognize the significance of the honor system. I pledge that I have read and understand the Constitution of the Honor Council, including the Honor Code, and agree to be bound by its provisions.

Additional information on the honor code and violations can be found in the [Birmingham-Southern Student Handbook](#) and on [the BSC website](#).

Netiquette

1. Check your email often--this is the method the instructor will use most often to communicate with you.
2. Adhere to the same standards in your digital communications as you would for traditional written language.
3. Use clear and concise language.
4. Remember that all college level communication should have correct spelling and grammar.
5. Be cautious when using humor or sarcasm as tone can be lost in an email or discussion post.
6. Using all capitals is the equivalent of SHOUTING and considered RUDE.

Student Grievance Policy

Students should follow the complaint process as outlined in the current [Birmingham-Southern College Student Handbook](#).

Accessibility/ Americans with Disabilities Act

Birmingham-Southern College complies with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Students with disabilities who seek accommodations must make their request by contacting the Office of Accessibility in-person, via email (accessibility@bsc.edu), or by calling 205-226-7909. The Office of Accessibility is located in the Counseling and Health Services Suite of Norton Center Room 241. Students who are registered with the Office of Accessibility are responsible for providing faculty with a copy of their accommodation letter and scheduling a meeting to discuss how their approved accommodations will apply to this course. Visit the [Office of Accessibility website](#) for additional information or contact Angela Smith at awsmith@bsc.edu.

Title IX

Birmingham-Southern College is committed to the creation and maintenance of a safe learning environment for students and the campus community. The College forbids any type of sexual or gender-based misconduct among its students, faculty, and staff. The College encourages all members of the academic community to report suspected sexual and gender-based misconduct to the appropriate authorities so that it can be investigated, remedied, and eliminated. Such misconduct is prohibited whether the actor is a student, faculty member, staff member, contractor, visitor, or another member of the College community. BSC forbids retaliation against any person who has opposed, reported or participated in an investigation concerning sexual or gender-based misconduct.

In accordance with federal policy, all College employees are required to report information related to discrimination and harassment which includes, but is not limited to, sexual assault, relationship violence, stalking, and sexual harassment. For this reason, if you tell a faculty member about a situation of sexual harassment or sexual violence or other related misconduct, the faculty member must share that information with the Title IX coordinator. As a student, you can report allegations of sexual misconduct to officials in Student Development (Assistant Dean of Students, Dana Bekurs; Associate Dean of Students, W. David Miller; Vice President for Student Development, David Eberhardt), Campus Police, or confidential resources in Counseling Services, Health Services, and Religious Life. Please refer to the [Title IX section](#) of the BSC website for more information on filing a report and available resources.

Inclement Weather

Inclement weather or other events beyond the control of the College that might cause risk or danger to students, faculty, and staff may occasionally result in changes to normal College operations, including cancellation of classes or events; the calendar schedule may be adjusted.

Covid-19

There will be assigned seating to ensure an organized arrangement. Students should maintain a distance of 6 feet while wearing a mask. Students are to display positive health tracker feedback at the beginning of class.