

James Sprunt Community College

ADDENDUM

2017-2019 GENERAL CATALOG

The following changes/additions/deletions apply to the 2017-2019
James Sprunt Community College General Catalog:

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CHANGES TO POLICIES, PROGRAM AND COURSE DESCRIPTIONS:

(inside cover): ACCREDITATIONS

Remove paragraph regarding accreditation of Medical Assisting Associate Degree Program and listing of address. The program is no longer offered.

Page 24: Accreditation

Remove paragraph regarding accreditation of Medical Assisting Associate Degree Program and listing of address. The program is no longer offered.

Page 31: Admissions Procedures

Application: Add the following: As part of the application process, students must complete the Residency Determination Service (RDS) online interview to determine residency status for tuition purposes.

Transcripts: Remove the following sentence: "If an applicant received his/her high school diploma from a correspondence school, the correspondence school must be accredited by the Distance Education Accrediting Commission (DEAC) to be acceptable, unless part of a regionally accredited college or university."

Page 39: Admission of Out of State Students

Change section title to read: Residency Determination Service

Insert the following:

Effective September 11, 2017, all applicants' residency for tuition purposes will be decided by the NC Residency Determination Service (RDS) to include, but not limited to, initial classifications, re-classifications, and appeals. The burden remains on the student to initiate and prove residency status. Students who disagree with the initial classification, may contact RDS at www.ncresidency.org, to begin either the reconsideration or appeal process.

The RDS reconsideration process is for students who:

- need to correct certain errors in the data submitted during the RDS online interview,
- have had a change in personal circumstances since completing their current determination,
- did not submit the required documentation within the initial consideration timelines (such as military dependency information, tax returns, pay stubs, etc)

Students who request reconsideration will be required to complete the online interview process again based upon their current situation. Submitting a request for reconsideration does not guarantee the residency classification will change from non-resident to resident.

The RDS Appeal process is for students whose circumstances have not changed but who believe their residency classification is incorrect. **Students have ten calendar days from the date of the determination they are appealing, or a status change due to a failed validation, to submit a Notification of Appeal through the RDS online system.**

**Remove 2nd paragraph on page 40*

Page 54: Residence Status of Tuition Payment

Add the following statement: As a result of North Carolina legislative directive, James Sprunt Community College now uses the Residency Determination Service to determine residency status for all students.

Page 125: Student Appeals--Academic Appeals

Change submittal information to read:

The form can be submitted via mail to:
North Carolina Post-Secondary Education Complaints
c/o Student Complaints
910 Raleigh Road
Chapel Hill, NC 27515-2688

or emailed to: studentcomplaint@northcarolina.edu.

More information regarding this process can be found at:
https://www.northcarolina.edu/sites/default/files/student_complaint_policy.pdf

Page 127: Student Appeals--Non-Academic Appeals

Change submittal information to read:

The form can be submitted via mail to:
North Carolina Post-Secondary Education Complaints
c/o Student Complaints
910 Raleigh Road
Chapel Hill, NC 27515-2688

or emailed to: studentcomplaint@northcarolina.edu.

More information regarding this process can be found at:
https://www.northcarolina.edu/sites/default/files/student_complaint_policy.pdf

Page 129: Institutional Graduation Requirements

Add the following:

In addition to the Institutional Graduation Requirements, Associate in Arts and Associate in Science graduates must pass the required courses prescribed in the curriculum with a minimum grade of “C” in each course.

Page 154: Accounting A25100

Effective Fall 2018, change to the following:

**Accounting and Finance
A25800**

| Course | Course Title | Sm Hrs |
|---------|---|--------|
| ACA 115 | Success and Study Skills | 1 |
| ACC 120 | Principles of Financial Accounting | 4 |
| CIS 111 | Basic PC Literacy | 2 |
| CIS 110 | or Introduction to Computers | 3 |
| BUS 121 | Business Math | 3 |
| _____ | Hum/Fine Arts Elect: (ART-111, -114, -115; HUM-110, -115, -122, -230; MUS-110, -112, -210; REL-110, -211, -212) | 3 |
| ENG 111 | Writing and Inquiry | 3 |

| | | | |
|---------|--|----|---|
| MAT 110 | Mathematical Measurement and Literacy | | 3 |
| MAT 143 | or Quantitative Literacy | | |
| ACC 121 | Principles of Managerial Accounting | | 4 |
| DBA 110 | Database Concepts | | 3 |
| ACC 140 | Payroll Accounting | | 2 |
| ———— | Beh/Social Sci: (ECO-251, ECO-252, HIS- 121,-122,-131,-132, PSY-150, SOC-210) | | 3 |
| COM 231 | Public Speaking | | 3 |
| ACC 122 | Principles of Financial Accounting II | | 3 |
| CTS 130 | Spreadsheet | | 3 |
| ACC 129 | Individual Income Taxes | | 3 |
| ECO 151 | Survey of Economics | or | |
| ECO 251 | Principles of Microeconomics | or | 3 |
| ECO 252 | Principles of Macroeconomics | | |
| BUS 115 | Business Law | | 3 |
| ACC 180 | Practices in Bookkeeping | | 3 |
| ACC 220 | Intermediate Accounting I | | 4 |
| ACC 150 | Accounting Software Applications | | 2 |
| BUS 270 | Professional Development | | 3 |
| OST 159 | Office Ethics | | 3 |
| BUS 125 | Personal Finance | | 3 |
| | TOTAL SEMESTER HOURS: 69 | | |

Page 157: Accounting Diploma and Certificates
Effective Fall 2018, change to the following:

ACCOUNTING AND FINANCE
D25800

| Course | Course Title | Sm Hrs |
|---------|-------------------------------------|--------|
| ACC 120 | Principles of Financial Accounting | 4 |
| CIS 111 | Basic PC Literacy | 2 |
| CIS 110 | or Introduction to Computers | 3 |
| BUS 121 | Business Math | 3 |
| BUS 115 | Business Law | 3 |
| DBA 110 | Database Concepts | 3 |
| ACC 121 | Principles of Managerial Accounting | 4 |
| ACC 140 | Payroll Accounting | 2 |
| ACC 150 | Accounting Software Applications | 2 |
| BUS 125 | Personal Finance | 3 |

| | | |
|---------|---------------------------------------|----|
| ACC 129 | Individual Income Taxes | 3 |
| ACC 122 | Principles of Financial Accounting II | 3 |
| CTS 130 | Spreadsheet | 3 |
| ECO 251 | Principles of Microeconomics | or |
| ECO 252 | Principles of Macroeconomics | 3 |
| ENG 111 | Writing and Inquiry | 3 |

TOTAL SEMESTER HOURS: 41

**COMPUTERIZED ACCOUNTING CLERK CERTIFICATE
C25800CC**

| Course | Course Title | Sm Hrs |
|---------|------------------------------------|--------|
| ACC 120 | Principles of Financial Accounting | 4 |
| CIS 111 | Basic PC Literacy | 2 |
| CIS 110 | or Introduction to Computers | 3 |
| BUS 121 | Business Math | 3 |
| CTS 130 | Spreadsheet | 3 |
| ACC 150 | Accounting Software Applications | 2 |
| DBA 110 | Database Concepts | 3 |

TOTAL SEMESTER HOURS: 17

**ACCOUNTING CLERK CERTIFICATE
C25800AC**

| Course | Course Title | Sm Hrs |
|---------|-------------------------------------|--------|
| ACC 120 | Principles of Financial Accounting | 4 |
| CIS 111 | Basic PC Literacy | 2 |
| CIS 110 | or Introduction to Computers | 3 |
| ACC 129 | Individual Income Taxes | 3 |
| ACC 121 | Principles of Managerial Accounting | 4 |
| ACC 140 | Payroll Accounting | 2 |
| ACC 150 | Accounting Software Applications | 2 |

TOTAL SEMESTER HOURS: 17

**BOOKKEEPING CERTIFICATE
C25800BK**

| Course | Course Title | Sm Hrs |
|---------|------------------------------------|--------|
| ACC 120 | Principles of Financial Accounting | 4 |
| CIS 111 | Basic PC Literacy | 2 |
| CIS 110 | or Introduction to Computers | 3 |
| BUS 121 | Business Math | 3 |

| | | |
|--------------------------|----------------------------------|---|
| ACC 180 | Practices in Bookkeeping | 3 |
| ACC 140 | Payroll Accounting | 2 |
| ACC 150 | Accounting Software Applications | 2 |
| TOTAL SEMESTER HOURS: 16 | | |

**BASIC ACCOUNTING CERTIFICATE
C25800BA**

| Course | Course Title | Sm Hrs |
|--------------------------|-------------------------------------|--------|
| ACC 120 | Principles of Financial Accounting | 4 |
| BUS 121 | Business Math | 3 |
| ACC 121 | Principles of Managerial Accounting | 4 |
| ACC 140 | Payroll Accounting | 2 |
| TOTAL SEMESTER HOURS: 13 | | |

Page 189: Diesel and Heavy Equipment Technology

Change/Add the following:

FOURTH SEMESTER

| | | | | |
|---------|-------------------------|----------|-----------|-----------|
| HET 218 | Tractor Project | 1 | 12 | 5 |
| WLD 112 | Basic Welding Processes | 1 | 3 | 2 |
| ENG 111 | Expository Writing | 3 | 0 | 3 |
| CIS 111 | Basic PC Literacy | 1 | 2 | 2 |
| | | 6 | 17 | 12 |

FIFTH SEMESTER

| | | | | |
|---------|------------------------------------|-----------|----------|-----------|
| ENG 115 | Oral Communication | 3 | 0 | 3 |
| BUS 135 | Principles of Supervision* | 3 | 0 | 3 |
| | Behavioral/Social Science Elective | 3 | 0 | 3 |
| | Humanities/Fine Arts Elective | 3 | 0 | 3 |
| | | 12 | 0 | 12 |

Page 192: Early Childhood Education

Effective Fall 2018: The program will be divided into the following tracks:

A55220CT: Career/Terminal AAS Track

Semester One

| Course | Lecture/Lab/Credit |
|------------------------------------|--------------------|
| ACA 115 Success and Study Skills | 0/2/1 |
| CIS 110 Introduction to Computers | 2/2/3 |
| EDU 119 Early Childhood Education | 4/0/4 |
| EDU 131 Child, Family, & Community | 3/0/3 |
| EDU 144 Child Development I | 3/0/3 |
| ENG 111 Writing and Inquiry | 3/0/3 |
| PED 110 Fit and Well for Life | 1/2/2 |
| Totals | 16/6/19 |

Semester Two

| Course | Lecture/Lab/Credit |
|----------------------------------|--------------------|
| EDU 145 Child Development II | 3/0/3 |
| EDU 151 Creative Activities | 3/0/3 |
| EDU 151A Creative Activities Lab | 0/2/1 |

| | |
|---|---------|
| EDU 280 Language/Literacy Experiences | 3/0/3 |
| ENG 115 Oral Communication | 3/0/3 |
| MAT 110 Math Measurement & Literacy | 2/2/3 |
| PSY 150 Gen Psych or SOC 210 Intro to Sociology | 3/0/3 |
| PED 111 Physical Fitness I or PED 112 Physical Fitness II | 0/3/1 |
| Totals | 17/7/20 |

Semester Three

| Course | Lecture/Lab/Credit |
|---|--------------------|
| EDU 146 Child Guidance | 3/0/3 |
| EDU 216 Foundations in Education | 3/0/3 |
| EDU 221 Children with Exceptionalities | 3/0/3 |
| EDU 234 Infants, Toddlers, and Twos | 3/0/3 |
| EDU 261 Early Childhood Admin I | 3/0/3 |
| PED 111 Physical Fitness I or PED 112 Physical Fitness II | 0/3/1 |
| SOC 213 Sociology of the Family | 3/0/3 |
| Totals | 18/3/19 |

Semester Four

| Course | Lecture/Lab/Credit |
|--|--------------------|
| EDU 153 Health, Safety, & Nutrition | 3/0/3 |
| EDU 153A Health, Safety, & Nutrition Lab | 0/2/1 |
| EDU 262 Early Childhood Admin II | 3/0/3 |
| EDU 284 Early Childhood Capstone Practicum | 1/9/4 |
| EDU 286 Early Childhood Issues | 1/0/1 |
| HEA 110 Personal Health/Wellness | 3/0/3 |
| Humanities/Fine Arts Elective* | 3/0/3 |
| Totals | 14/11/18 |

Total Credit Hours = 76

A55220TL: Transfer Track/Licensure

Semester One

| Course | Lecture/Lab/Credit |
|------------------------------------|--------------------|
| ACA 122 College Transfer Success | 0/2/1 |
| CIS 110 Introduction to Computers | 2/2/3 |
| EDU 119 Early Childhood Education | 4/0/4 |
| EDU 131 Child, Family, & Community | 3/0/3 |
| EDU 144 Child Development I | 3/0/3 |
| EDU 146 Child Guidance | 3/0/3 |
| ENG 111 Writing and Inquiry | 3/0/3 |
| Totals | 18/4/20 |

Semester Two

| Course | Lecture/Lab/Credit |
|---|--------------------|
| BIO 111 General Biology I | 3/3/4 |
| EDU 145 Child Development II | 3/0/3 |
| EDU 280 Language/Literacy Experiences | 3/0/3 |
| ENG 112 Writing/Research in the Disc | 3/0/3 |
| MAT 143 Quantitative Literacy | 2/2/3 |
| PSY 150 Gen Psych or SOC 210 Intro to Sociology | 3/0/3 |
| Totals | 17/5/19 |

Semester Three

| Course | Lecture/Lab/Credit |
|--|--------------------|
| CHM 151 General Chemistry I | 3/3/4 |
| COM 231 Public Speaking | 3/0/3 |
| EDU 216 Foundations in Education | 3/0/3 |
| EDU 221 Children with Exceptionalities | 3/0/3 |
| EDU 234 Infants, Toddlers, and Twos | 3/0/3 |
| Social/Behavioral Science Elective** | 3/0/3 |
| Totals | 18/3/19 |

Semester Four

| Course | Lecture/Lab/Credit |
|--|--------------------|
| EDU 151 Creative Activities | 3/0/3 |
| EDU 153 Health, Safety, & Nutrition | 3/0/3 |
| EDU 250 Teacher Licensure Preparation | 3/0/3 |
| EDU 284 Early Childhood Capstone Practicum | 1/9/4 |
| Humanities/Fine Arts Elective* | 3/0/3 |
| PED 110 Fit and Well for Life | 1/2/2 |
| Totals | 14/11/18 |

Total Credit Hours = 76

A55220NL: Transfer Track/Non-Licensure

Semester One

| Course | Lecture/Lab/Credit |
|------------------------------------|--------------------|
| ACA 122 College Transfer Success | 0/2/1 |
| CIS 110 Introduction to Computers | 2/2/3 |
| EDU 119 Early Childhood Education | 4/0/4 |
| EDU 131 Child, Family, & Community | 3/0/3 |
| EDU 144 Child Development I | 3/0/3 |
| EDU 146 Child Guidance | 3/0/3 |
| ENG 111 Writing and Inquiry | 3/0/3 |
| Totals | 18/4/20 |

Semester Two

| Course | Lecture/Lab/Credit |
|---|--------------------|
| BIO 111 General Biology I | 3/3/4 |
| EDU 145 Child Development II | 3/0/3 |
| EDU 280 Language/Literacy Experiences | 3/0/3 |
| ENG 112 Writing/Research in the Disc | 3/0/3 |
| MAT 143 Quantitative Literacy | 2/2/3 |
| PSY 150 Gen Psych or SOC 210 Intro to Sociology | 3/0/3 |
| Totals | 17/5/19 |

Semester Three

| Course | Lecture/Lab/Credit |
|--|--------------------|
| CHM 151 General Chemistry I | 3/3/4 |
| COM 231 Public Speaking | 3/0/3 |
| EDU 261 Early Childhood Admin I | 3/0/3 |
| EDU 221 Children with Exceptionalities | 3/0/3 |
| EDU 234 Infants, Toddlers, and Twos | 3/0/3 |
| Social/Behavioral Science Elective** | 3/0/3 |
| Totals | 18/3/19 |

Semester Four

| Course | Lecture/Lab/Credit |
|--|--------------------|
| EDU 151 Creative Activities | 3/0/3 |
| EDU 153 Health, Safety, & Nutrition | 3/0/3 |
| EDU 262 Early Childhood Admin II | 3/0/3 |
| EDU 284 Early Childhood Capstone Practicum | 1/9/4 |
| Humanities/Fine Arts Elective* | 3/0/3 |
| PED 110 Fit and Well for Life | 1/2/2 |
| Totals | 14/11/18 |

Total Credit Hours = 76

*The Humanities/Fine Arts Elective may be chosen from the following courses:

- ART 111 Art Appreciation
- ART 114 Art History Survey I
- ART 115 Art History Survey II
- ART 116 Survey of American Art
- HUM 121 The Nature of America
- HUM 122 Southern Culture
- MUS 110 Music Appreciation
- MUS 112 Introduction to Jazz
- MUS 210 History of Rock Music
- REL 110 World Religions
- REL 211 Introduction to the Old Testament
- REL 212 Introduction to the New Testament

**The Social/Behavioral Science Elective may be chosen from the following courses:

- ECO 251 Prin of Microeconomics
- ECO 252 Prin of Macroeconomics
- HIS 111 World Civilization I
- HIS 112 World Civilization II
- HIS 131 American History I
- HIS 132 American History II
- POL 120 American Government
- PSY 150 General Psychology

Page 199: Information Technology Networking Certificate:

Effective Fall 2018

| | | | | |
|---------|----------------------------|----------|-----------|-----------|
| NET 125 | Introduction to Networks | 1 | 4 | 3 |
| NOS 110 | Operating Systems Concepts | 2 | 3 | 3 |
| SEC 110 | Security Concepts | 2 | 2 | 3 |
| NET 126 | Routing Basics | 1 | 4 | 3 |
| | | 6 | 13 | 12 |

Page 199: Information Technology Foundations Certificate:

Add the following:

Effective Fall 2018

| | | | | |
|---------|----------------------------|----------|-----------|-----------|
| CIS 110 | Introductions to Computers | 2 | 2 | 3 |
| CTI 110 | Web, Pgm, & DB Foundation | 2 | 2 | 3 |
| CTI 120 | Network & Sec Foundation | 2 | 3 | 3 |
| NOS 110 | Operating Systems Concepts | 2 | 3 | 3 |
| | | 8 | 10 | 12 |

Page 202: Office Administration**Effective Fall 2018: Change to the following:**

| Course | Course Title | Sm Hrs |
|---------|---|--------|
| ACA 115 | Success and Study Skills | 1 |
| BUS 121 | Business Math | 3 |
| OST 131 | Keyboarding | 2 |
| CIS 111 | Basic PC Literacy | 2 |
| CIS 110 | or Introduction to Computers | 3 |
| BUS 151 | People Skills | 3 |
| _____ | Hum/Fine Arts Elect: (ART-111, -114, -115; HUM-110, -115, -122, -230; MUS-110, -112, -210; REL-110, -211, -212) | 3 |
| ENG 111 | Writing and Inquiry | 3 |
| MAT 110 | Mathematical Measurement and Literacy | 3 |
| MAT 143 | or Quantitative Literacy | 3 |
| DBA 110 | Database Concepts | 3 |
| OST 136 | Word Processing | 3 |
| BUS 153 | Human Resource Management | 3 |
| OST 145 | Social Media for Office Professionals | 3 |
| ACC 120 | Prin of Financial Accounting | 4 |
| CTS 130 | Spreadsheet | 3 |
| OST 164 | Office Editing | 3 |
| BUS 260 | Business Communications | 3 |
| COM 231 | Public Speaking | 3 |
| BUS 115 | Business Law | 3 |
| ACC 150 | Accounting Software Applications | 2 |
| OST 289 | Office Admin Capstone | 3 |
| OST 159 | Office Ethics | 3 |
| OST 184 | Records Management | 3 |
| OST 138 | Office Applications II | 3 |
| _____ | Beh/Social Sci: (ECO-251, ECO-252, HIS-121,-122,-131,-132, PSY-150, SOC-210) | 3 |
| | TOTAL SEMESTER HOURS: 68 | |

Diploma

| Course | Course Title | Sm Hrs |
|---------|---------------|--------|
| BUS 121 | Business Math | 3 |
| OST 131 | Keyboarding | 2 |

| | | |
|--------------------------|---------------------------------|---|
| CIS 111 | Basic PC Literacy | 2 |
| CIS 110 | or Introduction to Computers | 3 |
| BUS 151 | People Skills | 3 |
| ENG 111 | Writing and Inquiry | 3 |
| OST 136 | Word Processing | 3 |
| OST 159 | Office Ethics | 3 |
| OST 184 | Records Management | 3 |
| DBA 110 | Database Concepts | 3 |
| CTS 130 | Spreadsheet | 3 |
| OST 164 | Office Editing | 3 |
| BUS 260 | Business Communications | 3 |
| COM 231 | Public Speaking | 3 |
| TOTAL SEMESTER HOURS: 37 | | |

**CUSTOMER SERVICE CERTIFICATE
C25370CS**

| Course | Course Title | Sm Hrs |
|--------------------------|---------------------------------------|--------|
| OST 164 | Office Editing | 3 |
| CIS 111 | or Basic PC Literacy | 2 |
| CIS 110 | Introduction to Computers | 3 |
| BUS 151 | People Skills | 3 |
| OST 159 | Office Ethics | 3 |
| OST 145 | Social Media for Office Professionals | 3 |
| TOTAL SEMESTER HOURS: 14 | | |

**GENERAL OFFICE ASSISTANT CERTIFICATE
C25370GO**

| Course | Course Title | Sm Hrs |
|--------------------------|---------------------------|--------|
| OST 131 | Keyboarding | 2 |
| CIS 111 | or Basic PC Literacy | 2 |
| CIS 110 | Introduction to Computers | 3 |
| BUS 151 | People Skills | 3 |
| OST 184 | Records Management | 3 |
| OST 136 | Word Processing | 3 |
| CTS 130 | Spreadsheet | 3 |
| TOTAL SEMESTER HOURS: 16 | | |

**SOFTWARE USE CERTIFICATE
C25370SU**

| Course | Course Title | Sm Hrs |
|------------|---------------------------------------|--------|
| OST 131 | Keyboarding | 2 |
| CIS 111 or | Basic PC Literacy | 2 |
| CIS 110 | Introduction to Computers | 3 |
| OST 136 | Word Processing | 3 |
| OST 145 | Social Media for Office Professionals | 3 |
| DBA 110 | Database Concepts | 3 |
| CTS 130 | Spreadsheet | 3 |

TOTAL SEMESTER HOURS: 16

Page 219: College Transfer Program

Add the following to last paragraph:

In addition, Associate in Arts and Associate in Science graduates must pass the required courses prescribed in the curriculum with a minimum grade of “C” in each course.

Page 282: Course Descriptions

Add the following:

ACC 180 Practices in Bookkeeping 3 0 3

Prerequisites: ACC 120

Corequisites: None

This course provides advanced instruction in bookkeeping and record-keeping functions. Emphasis is placed on mastering adjusting entries, correction of errors, depreciation, payroll, and inventory. Upon completion, students should be able to conduct all key bookkeeping functions for small businesses.

Page 300 Course Descriptions

Change CJC 100 class hours and semester hours to 10 and 20. Lab hours and description remain the same.

Page 310: Course Descriptions

Add the following:

CTI – Computer Tech Integration

CTI 110 Web, Pgm, & Db Foundation 2 2 3

Prerequisites: None

Corequisites: None

This course covers the introduction of the tools and resources available to students in programming, mark-up language and services on the Internet. Topics include standard mark-up language Internet services, creating web pages, using search engines, file transfer programs; and database design and creation with DBMS products. Upon completion students should be able to demonstrate knowledge of programming tools, deploy a web-site with mark-up tools, and create a simple database table.

CTI 120 Network & Sec Foundation 2 2 3

Prerequisites: None

Corequisites: None

This course introduces students to the Network concepts, including networking terminology and protocols, local and wide area networks, and network standards. Emphasis is placed on securing information systems and the various implementation policies. Upon completion, students should be able to perform basic tasks related to networking mathematics, terminology, media and protocols.

Page 362: Course Descriptions

Add the following:

NET 125 Introduction to Networks

1 4 3

Prerequisites: None

Corequisites: None

This course introduces the architecture, structure, functions, components, and models of the Internet and computer networks. Topics include introduction to the principles of IP addressing and fundamentals of Ethernet concepts, media, and operations. Upon completion, students should be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

NET 126 Routing Basics

1 4 3

Prerequisites: None

Corequisites: None

This course focuses on initial router configuration, router software management, routing protocol configuration, TCP/IP, and access control lists (ACLs). Emphasis will be placed on the fundamentals of router configuration, managing router software, routing protocol, and access lists. Upon completion, students should have an understanding of routers and their role in WANs, router configuration, routing protocols, TCP/IP, troubleshooting, and ACLs.