

# Introduction to Programming

## CIS-130 30C 0

Fall Term 2020-2021 School Year Section 30C 0 3.00 Credits 08/24/2020 to 12/11/2020 Modified 01/05/2021

### Meeting Times and Location

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ONLINE

### Contact Information

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#### Instructor: Roger Morris

Email: [roger.morris@southeasttech.edu](mailto:roger.morris@southeasttech.edu)

Office: TC202

Phone: 605 367-5858

#### Office Hours

Monday, Wednesday, 9:00 AM to 10:00 AM, TC 202 or TC 210

Monday, Wednesday, 1:00 AM to 2:00 AM, TC 202 or TC 210

Tuesday, Thursday, 3:00 AM to 3:30 AM, TC 202 or TC 210

### Course Description

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Introduces students to the terminology, fundamentals and application of the program development process. Basic programming concepts such as problem analysis, logic organization and design, and program development and testing will be implemented. Topics covered include data types, operators, expressions, program flow control statements, and methods.

### Outcomes

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#### Course Outcomes

Upon successful completion of this course, the student shall be able to

- Define and utilize database terminology effectively.
- Create queries using SQL.
- Diagram users' requirements using modeling techniques.
- Transform data models into normalized relations.
- Describe database access standards.

#### Program Outcomes

Science and Technology

- Develop software applications to solve a business problem.
- Demonstrate proficiency in the design and use of databases.

### Problem Solving/Critical Thinking

- Appraise the strengths and weaknesses of one's completed work.
- Analyze a client's software requirements in order to develop possible solutions.

### Professionalism

- Utilize professional resources (i.e. professional organizations, media and IT websites).
- Use effective time management skills.

### Communication

- Research and present an IT topic using appropriate terminology.
- Write programs with clarity, efficiency, and accuracy.

## Additional Outcomes

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## Course Materials

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Oracle online curriculum is used in this course which also serves as the textbook.

## Deliverables

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### Assignments

Assignments are to be turned in via MyTech while quizzes and tests are to be completed online in the Oracle online curriculum.

## Evaluation Procedures and Grading

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### Criteria

#### Exams (40% of grade)

Exams are assigned from the Oracle web site. There are 6 exams (2 1-part and 2 2-part). The lowest test score will be dropped from the final grade.

#### Quizzes (20% of grade)

Quizzes are given after most lessons. They are being recorded in 4 parts (midterm, final, midterm, final)

#### Labs/Database Projects (40% of grade)

- Each assignment will be given a due date.
- Being absent from class is not an excuse for turning in an assignment late.
- A due date will not be changed unless prior arrangements have been made.
- Student may receive partial credit for partial solutions.

### Breakdown

#### Grading Scale:

A+ 99-100%	B+ 89%	C+ 79%	D + 69%	F = 59% and Below
A 94-98%	B 84-88%	C 74-78%	D 64-68%	
A- 90-93%	B- 80-83%	C- 70-73%	D- 60-63%	

# Course Expectations

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## Additional Items

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### The class is broken into two parts

#### Part 1:

##### Database Design

This part lays the foundation for understanding relational databases and database design. After learning about the Oracle Academy and Oracle's commitment to education, students plunge into the theory and practice of data modeling. A data model is a conceptual representation of the data structures in a database. The data structures include the data objects (entities), the associations between data objects (relationships), and the rules that dictate operations on the objects (business rules). Students are exposed to data modeling through many real life examples that are relevant to their age group -- case studies include a fast food restaurant and a small music business. In addition to data modeling concepts, the course engages students in activities designed to develop "professional skills." The skills highlighted in the Database Design course include teamwork and team building, public speaking, interviewing, presentation, and project management. The data modeling portion of the course culminates in Section 15 with a final project which assesses all of the data modeling skills learned to date. After completing the project, students begin to learn the Structured Query Language (SQL), the standard language for querying and modifying relational databases. The final three sections of the course (Sections 16-18) introduce the SQL programming language and teach students how to write basic SELECT statements

Daily assignments will be completed in a group setting.

#### Part 2:

##### Database Programming with SQL

In this part students gain an understanding of relational databases through the powerful Structured Query Language (SQL). The SQL commands, functions, and operators supported by Oracle as extensions to standard SQL are emphasized. Students learn to create and maintain database objects such as tables, indexes, views, constraints, and sequences. Students practice SQL using SQL Workshop, an application that is available via a web browser in Oracle HTML DB. The Database Programming with SQL portion of the Academy curriculum is designed to help prepare students to pass the Oracle Certified Professional (OCP) exam, "Introduction to Oracle9i SQL Exam." As part of the Academy, many students will want to take the OCP exam as it is the industry standard for proficiency with SQL. In the Database Programming with SQL course, students focus on searching for a job, job interviewing skills, and writing cover and thank you letters.

Daily Assignments will be completed as individuals.

## Course Outline

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## Institutional Policies

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### Course Subject to Change

The syllabus is a statement of intent and schedule of topics, activities, assessments, and requirements that serves as a guideline for students. The syllabus is an overall road map to ensure students will achieve both the course learning objectives and the program-level learning objectives as well as develop lifelong learning skills.

The scheduled educational activities are subject to change with reasonable advance notice to students by either the instructor or academic administration. The grading and attendance policies are not subject to change once posted.

Students wishing to appeal changes to a course syllabus must first do so in writing to their instructor. If a successful resolution is not achieved after submitting the written appeal, the student has the option to file a written appeal to the appropriate Associate Dean of Curriculum and Instruction or Dean of Curriculum and Instruction. If the second level appeal does not result in a

resolution, the student can submit a final appeal to the Vice President of Academic Affairs. The review and final decision of the Vice President of Academic Affairs is final and not subject to appeal.

## Attendance

### Administrative Withdraw for Non-Attendance

Students are expected to attend all sessions of courses for which they are enrolled. Absences do not excuse the student from meeting course requirements. Each instructor will evaluate the student's progress to determine how to handle outstanding assignments and assessments. Students who have a record of zero attendance for fourteen (14) calendar days will be administratively withdrawn from the course(s) the absence is occurring, resulting in a grade of "W" for the course. Students who receive financial aid may have their financial aid status affected. More information is located in the [Southeast Tech Catalog](http://catalog.southeasttech.edu/) (<http://catalog.southeasttech.edu/>):

## Student Learning Outcomes

Student success is important to Southeast Tech faculty, and all faculty are involved in assessing student learning. Upon graduation, Southeast students will have competence in the following four common learning outcomes:

**Technology:** Students will be able to explain industry-relevant concepts (knowledge) and demonstrate industry-relevant technical skills (performance).

**Communication:** Students will be able to define the purpose of the communication; organize and structure the communication; provide supporting material; demonstrate precision of language; and professionally deliver and format the communication.

**Problem Solving & Critical Thinking:** Students will be able to define the problem; analyze the problem; generate solutions; evaluate solutions; and select the best solution.

**Professionalism:** Students will be able to demonstrate positive work ethic; collaborate as part of a team; adapt to change; adhere to professional standards; and model integrity and ethics.

## Student Conduct, Cheating and Plagiarism

Students attending Southeast Technical College are expected to comply with all pertinent state laws and take personal responsibility for their conduct.

Southeast policies authorize the Vice President of Academic Affairs to suspend or terminate any student from the college for misconduct as outlined in the rules of this policy. The following student misconduct shall constitute grounds for student discipline, suspension, or termination when such activity occurs on school grounds, in the online course environment or during an educational function under the auspices of the school board: acts of dishonesty, including cheating and plagiarism or other forms of dishonesty relating to academic achievement.

## Test Proctoring

The Southeast Testing Center offers test proctoring located in the Wood Center Building, Room 103. Parking is located just north of the building. Online instructors will communicate details regarding required test proctoring and how to sign up to take these assessments. Contact the Testing Center at 605.367.6014 or email [testing@southeasttech.edu](mailto:testing@southeasttech.edu) for more information.

## Coronavirus Face Masks, Coverings and Distancing

Southeast Tech is a face mask-required institution. Southeast Tech is committed to providing a safe environment for all members of our community. To honor that commitment, the health and safety of our students, faculty, staff and guests must be a top priority. For all Coronavirus updates and plans for keeping everyone safe, please visit our website: [Southeast Coronavirus Website](https://www.southeasttech.edu/coronavirus/face-masks.php) (<https://www.southeasttech.edu/coronavirus/face-masks.php>)

## Safety

Violation of safety to self and others and/or violations of safe operating practices of equipment may result in the reduction or loss of a daily grade; removal from class and/or other disciplinary action.

## Disability Services

Students with documented disabilities may be eligible for certain classroom accommodations. Disabilities may include hearing, visual, physical, psychological and learning impairments. Accommodations may include additional testing time, private testing rooms, readers, note takers, interpreters, and taped/digital texts. Students must provide the Disability Services Coordinator with recent written documentation of a disability before qualifying for services. Contact the Disability Services Coordinator at 605.367.4450 for more information.

## ADA Statement

The instructor in this course will act with integrity and strive to engage in equitable verbal and nonverbal behavior with respect to differences from age, gender, race, handicapping conditions, and religion. Students with special needs as addressed by the Americans with Disabilities Act that need course materials in alternative formats should notify instructor immediately. Reasonable efforts will be made to accommodate those special needs.

## Freedom of Speech

Southeast Technical College students are both citizens and members of the Southeast Tech community. Students should enjoy the same freedom of speech, peaceful assembly, and right to petition that other citizens enjoy and should abide by the obligations and expectations as members of the Southeast Tech community.

Southeast Tech strives to create an environment in which diverse opinions can be expressed and heard. Students have the right to peacefully express their views and opinions, regardless of whether others may disagree, but not in such a way as to interfere with the rights of others or the operation of the college. Views expressed should not violate any of Southeast Tech policies or core values.

## Netiquette Guidelines

Netiquette should be used in all electronic communications. Please review this "Top Ten" list for successfully communicating with your instructors and classmates.

### **Respect Goes a Long Way!**

*Treat instructors, classmates and all others in a professional and respectful manner in all communications. A good rule of thumb is to only post what you would be willing to say to your reader's face.*

### **Say What?**

*Use a clear, descriptive subject line when sending email messages.*

### **Use Your Inside Voice Please**

*Be cautious of using ALL CAPS. This implies you are yelling at your reader.*

### **Proofread, Proofread, Proofread**

*Always make an effort to use proper punctuation, spelling and grammar.*

### **Know Your Audience**

*Sarcasm and humor can easily be misinterpreted. Online messages are lacking the non-verbal communication cues that face-to-face conversations allow.*

### **Attempt to Find Your Own Answer**

*If you are stuck on an assignment, it is easy to reach out and ask for clarification. Part of the learning process is to try to problem-solve on your own first. If you are still confused, we are here to help!*

### **Think Before you Type**

*Never type when you are angry or frustrated. Please consider having a neutral third party read your message prior to sending.*

### **Agree to Disagree**

*Remember you may not always have the same viewpoint as others. It is fine to disagree as long as you are respectful. There can be disagreement without disrespect.*

### **Shorter is Better**

*Keep paragraphs and messages short and to the point.*

### **Patience is Key**

*Allow for response time. It is easy to forget that there are people on the other side of the online communication. An immediate response is not always feasible. Please plan accordingly.*

## **Notice of Nondiscriminatory Policy**

Southeast Tech does not discriminate on the basis of race, color, creed, religion, age, gender (including pregnancy), sexual orientation, disability, national origin or ancestry, military/veteran status, genetic information, or any other category protected by law in its educational programs, admissions policies, employment policies, financial aid, or other institute-administered programs. Inquiries regarding this policy may be directed to:

#### **Brett Arenz**

201 E. 38th Street  
Sioux Falls, SD 57105  
605-367-4670

[Brett.Arenz@k12.sd.us](mailto:Brett.Arenz@k12.sd.us)

*or to the*

Kansas City Office  
Office of Civil Rights  
U.S. Department of Education  
One Petticoat Lane  
1010 Walnut Street, 3<sup>rd</sup> Floor, Suite 320  
Kansas City, MO 64106

Telephone: 816-268-0550  
FAX: 816-268-0599 TDD: 800-877-8339  
email: [OCR.KansasCity@ed.gov](mailto:OCR.KansasCity@ed.gov)

## **Title IX/Sexual Misconduct/Sexual Assault/Sexual Offense**

Southeast Tech is committed to providing a learning and working environment free of unlawful harassment based on an individual's race, color, religion, creed, ancestry, national origin, gender, sexual orientation, disability, age, protected military/veteran status, genetic information or any other basis protected by law.

Part of the institute's goal and responsibilities is to provide training for employees and students regarding how to respond to and report sexual misconduct/harassment concerns, how to intervene, and how to maintain a working and learning environment that is positive and respectful.

All reports of sexual misconduct, harassment or discrimination at Southeast Tech are investigated with the goal of eliminating the concern, preventing its recurrence, and addressing its effects. See Student/Complaint Process and Harassment for more information.

**Contact Information for the Southeast Technical College Title IX Coordinator:**

#### **Brett Arenz**

201 E. 38th Street  
Sioux Falls, SD 57105

Concerns may be reported directly to this individual in person, by calling 605-367-4670, or by emailing [Brett.Arenz@k12.sd.us](mailto:Brett.Arenz@k12.sd.us). Individuals with immediate concerns should call campus security at 605-941-9003.

The following are additional resources regarding Title IX, sexual misconduct, harassment and discrimination:

- [Sexual Assault Awareness, Prevention & Reporting \(http://catalog.southeasttech.edu/content.php?catoid=23&navoid=15183\)](http://catalog.southeasttech.edu/content.php?catoid=23&navoid=15183)
- [Title IX and Sex Discrimination \(U.S. Department of Education\) \(http://www2.ed.gov/about/offices/list/ocr/docs/tix\\_dis.html\)](http://www2.ed.gov/about/offices/list/ocr/docs/tix_dis.html)
- [Know Your IX \(http://knowyourix.org/\)](http://knowyourix.org/)
- [Sioux Falls Helpline Center \(http://helplinecenter.org/\)](http://helplinecenter.org/)

## Student Right-to-Know/Campus Security Act

Southeast Tech is required under Public Law 101-542 to encourage students to report all crimes (murder, rape, forcible or non-forcible sex offenses, robbery, aggravated assault, burglary, motor vehicle and other thefts or crimes) which occur on the Southeast Tech Campus to the local law enforcement offices and to the Southeast Tech Student Success Center or campus security. The Southeast Tech Campus is policed by the Sioux Falls Police Department and Minnehaha County Sheriff's Department. Southeast Tech's security officers are contracted through the Minnehaha County Sheriff's Department or independent security.

Access to the Southeast Tech campus facilities is authorized through the President's Office. Building keys are issued to staff as needed. All staff are authorized to call the appropriate authorities in case of an emergency. All buildings shall be locked and unlocked by Southeast Tech employees. Southeast Tech employees must be present when buildings are open. Unless other arrangements have been made, Southeast Tech buildings will open at approximately 7:00 am during weekdays and will close Monday through Thursday at approximately 10:00 pm. On Friday, the buildings will close at approximately 5:00 pm. All buildings remain locked after hours and throughout the weekend unless prior arrangements have been made.

Southeast Tech provides students and staff with educational programs/information established to prevent the occurrence of all crimes (including sex offenses) on campus and procedures to be followed, if such crimes occur. These programs/information are provided during campus events, within courses, or through media such as brochures, websites, the Catalog, etc. In addition, Southeast Tech provides a full-time day security officer and part-time evening security coverage.

In the event a student believes that a crime (including all types of sexual misconduct) has occurred, the student should contact local law enforcement authorities and notify a Southeast Tech administrator or campus security. It is important that all evidence be preserved for law enforcement investigation. In addition to criminal prosecution, institutional disciplinary action may be taken in all situations involving a crime conviction on the Southeast Tech campus. Sanctions may include oral or written reprimand, short-term suspension, long-term suspension, or termination. Accuser and accused will have the same opportunities during disciplinary proceedings and both will be informed of the outcome of these proceedings. Students involved in campus crimes will be counseled by Southeast Tech staff and referrals made as needed.

## Family Educational Rights & Privacy Act

FERPA stands for the Family Educational Rights and Privacy Act of 1974. It is a federal law governing the privacy and handling of educational records and giving specific rights to students. You can find more information about the law at <http://www.ed.gov/policy/gen/guid/fpco/ferpa/students.html> (<http://www.ed.gov/policy/gen/guid/fpco/ferpa/students.html>)

## Student Communications

Southeast Tech's student email accounts will be used as Southeast Tech's official means of communications with students. Southeast Tech students should also use the STInet Student and Campus Life tabs for information regarding important upcoming events and required dates for fee payment, etc. The Student and Campus Life tabs will also inform students about job opportunities, scholarship information, and other important announcements.

## Services for Non-traditional Students

Southeast Tech offers special targeted services for a wide variety of nontraditional students. Success Advisors are available to assist eligible individuals in selecting a program of study, applying for financial assistance, locating childcare, and networking with community resources. Students considered nontraditional fit into one of the following categories:

Individuals in training programs that are nontraditional for their gender (25% or less of the individuals working in that field are of the same gender);

1. Single parents;
2. Single pregnant women;
3. Displaced homemakers;
4. Dislocated workers;
5. Students not coming directly out of high school;
6. Individuals unsure of their career direction.