Computer Information Technology

Master Course Syllabus: **ITSE 1391 – Special Topics in Computer Programming**
Fundamentals of Software Testing
Credit Semester Year
Synonym [XXXXX – Section]

Lecture: [insert campus, classroom, days and times here]
Lab: [insert campus, classroom, days and times here]

Instructor: [insert name here]
Office Telephone: [223-xxxx]
Fax: [223-xxxx]
Office: [insert office location here]
Office Hours: [insert office hours here and in the online office hours application]
E-mail: [xxxx@austincc.edu]
Home page: [http://www.austincc.edu/xxxx]
[https://sites.google.com/a/austincc.edu/xxxx/]

COURSE DESCRIPTION & RATIONALE

- **Credit Hours:** ***3***
- **Classroom Contact Hours per week:** ***2hrs 40mins***
- **Laboratory Contact Hours per week:** ***50mins***

Course Description: [Insert course description from ACC Catalog]
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. **Fundamentals of Software Testing -** This course is a study of the multiple phases of testing necessary to ensure the reliability of software products.

Pre-requisite: B-Reading and Math.

Course Rationale: This course is required as part of the Associate of Applied Science degree in Software Testing. The course will introduce the student to the concepts of software testing and the use of several software testing and reporting tools.

Course Objectives / Learning Outcomes: As an outcome of taking this course, the student will be able to:

1. Demonstrate a practical understanding of test strategies and how they relate to the reliability of software products.
2. Develop the ability to be curious, thorough, observant and detail-oriented when interpreting and documenting the results of experimental test setups.
3. Develop an awareness of important test metrics including correct outcomes and performance.

SCANS (Secretary's Commission on Achieving Necessary Skills):
The following list summarizes the SCANS competencies addressed in this particular course:

RESOURCES 1.1 Manages Time	**INTERPERSONAL** 2.1 Participates as a Member of a Team 2.2 Serves Clients/Customers 2.6 Works with Cultural Diversity	**INFORMATION** 3.1 Acquires and Evaluates Information 3.2 Organizes and Maintains Information 3.3 Uses Computers to Process Information	**SYSTEMS** 4.1 Understands Systems 4.2 Monitors and Corrects Performance 4.3 Improves and Designs Systems
TECHNOLOGY 5.1 Selects Technology 5.2 Applies Technology to Task 5.3 Maintains and Troubleshoots Technology	**BASIC SKILLS** 6.1 Reading 6.2 Writing 6.3 Arithmetic 6.5 Listening 6.6 Speaking	**THINKING SKILLS** 7.1 Creative Thinking 7.2 Decision Making 7.3 Problem Solving 7.4 Mental Visualization 7.5 Knowing How to Learn 7.6 Reasoning	**PERSONAL SKILLS** 8.1 Responsibility 8.4 Self-Management 8.5 Integrity/Honesty

Approved Text and Teaching Materials: [insert textbook information from approved department list]
Foundations of Software Testing, ISTQB Certification, 3rd edition, Black / Van Veenendaal / Graham, Cengage Learning, 2012. (ISBN-13: 978-1-4080-4405-6, ISBN-10: 1-408-04405-6)

Instructional Methodology: This course will have 75% lecture and 25% laboratory. The CIS open labs are available for students to work outside of scheduled lab time.

Grade Policy:
Grades will be assigned based both on concepts and practical application. Exams, quizzes, and lab projects will be a part of the grade. An overall grade will be assigned on the following grading scale:

90% - 100%	A
80% - 89%	B
70% - 79%	C
60% - 69%	D

0% - 59% F

Each student's grade for this course consists of 3 comprehensive exams (60%), laboratory exercises (20%), and a semester project (20%). Laboratory exercises receiving a grade of less than 90% may be resubmitted for grading subject to a maximum grade of 90%.

EXAM 1	200 points total
EXAM 2	200 points total
EXAM 3	200 points total
Laboratory Exercises	200 points total
Semester Project	200 points total
TOTAL	**1000** points

Scheduling of computer time outside of regular lab time is the student's responsibility. Availability of computers is **NOT** an excuse for being late with any assignment. The last date to submit assignments for consideration this semester is [insert date here].

COURSE SCHEDULE

[Instructor must add a course schedule for the semester indicating required readings, exams and assignments. The topic list should be copied from the list of topics approved at the time the textbook was adopted.]

Fundamentals of Software Testing
Course Schedule
[insert dates and indicate holidays]

Week Num	Date	Topic	Lab Exercises
1		Course Introduction / Lab Orientation Testing Overview / Product Defect Examples	
2		Development Process Model Overview ISTQB Overview	
3		Chapter 1 Fundamentals of Testing Chapter 1 continued	Lab 1
4		Chapter 1 continued Chapter 2 Testing throughout the software life cycle	Lab 2
5		Chapter 2 continued Review for EXAM 1	
6		**EXAM 1** Chapter 3 Static Techniques	Lab 3
7		Chapter 3 continued Chapter 3 continued	Lab 4
8		Chapter 4 The Test Development Process	

		Chapter 4 continued	Lab 5
9		Chapter 4 continued Review for EXAM 2	Lab 6
10		**EXAM 2** Chapter 5 Test Management	
11		Chapter 5 continued Chapter 5 continued	Lab 7
12		Chapter 6 Tool support for testing Chapter 6 continued	Lab 8
13		Chapter 6 continued	Lab 9
14		Chapter 7 ISTQB Foundation Exam Chapter 7 continued	Lab 10
15		Review for Exam 3 **EXAM 3**	
16		**Semester Project Report/Presentations** **Semester Project Report/Presentations**	

Note: The instructor has the prerogative to change the course schedule as required.
Students are expected to read and study the assigned material, per the course schedule, **BEFORE** each class, **this includes the lab assignments!!**

COURSE/CLASS POLICIES

Technology Support Services
In response to COVID-19-related campus closures, Austin Community College now provides free, secure drive-up Wi-Fi to students and employees in the parking lots of all campus locations. Wi-Fi can be accessed seven days a week, 7 am to 11 pm. Additional details are available at https://www.austincc.edu/coronavirus/drive-up-wifi

Students who submit the Student Technology Access Form and indicate they need help accessing their online learning environment to complete their courses are eligible to check out an ACC iPad for use during the semester. You must be registered for a credit course, Adult Education, or Continuing Education course.

Posting of Assignment Grades
Assignments (e.g. programs) are typically graded within one week after the assignment due date. Grades are recorded in Blackboard and may be accessed via the My Grades.

Attendance/Class Participation
Regular and punctual class and laboratory attendance is expected of all students. If attendance or compliance with other course policies are unsatisfactory, the instructor may withdraw students from the class. **For online classes,** "Regular and timely class participation in discussions and completion of work is expected of all students. If attendance or compliance with other course policies are unsatisfactory, the instructor may withdraw students from the class."
"In the event, that the college or campus closes due to unforeseen circumstances (for example, severe weather or other emergency), the student is responsible for communicating with their professor during the closure and completing any assignments or other activities designated by their professor as a result of class sessions being missed."

Computer Time
Scheduling computer time outside of regular lab time is the student's responsibility. Availability of computers is NOT an excuse for being late with a lab project assignment.

Withdrawal Policy
It is the responsibility of each student to ensure that his or her name is removed from the roll should he or she decide to withdraw from the class. The instructor does, however, reserve the right to drop a student should he or she feel it is necessary. If a student decides to withdraw, he or she should also verify that the withdrawal is submitted before the Final Withdrawal Date. The last date to withdraw for this semester is **Month XXth, YEAR**. The student is also strongly encouraged to retain their copy of the withdrawal form for their records.

If the withdrawal is not completed by **5 PM** on the last day to withdraw, the student will receive a performance grade (A, B, C, D, or F) that they have earned. It is not the responsibility of the instructor to withdraw the students from their class even though the instructor has the prerogative to do so under the above-listed circumstances.

Students are responsible for understanding the impact that withdrawal from a course may have on their financial aid, veterans' benefits, and international student status. Per state law, students enrolling for the first time in Fall 2007 or later at any public Texas college or university may not withdraw (receive a W) from more than six courses during their undergraduate college education. Some exemptions for good cause could allow a student to withdraw from a course without having it count toward this limit. Students are strongly encouraged to meet with an advisor when making decisions about course selection, course loads, and course withdrawals."

Incompletes

"An incomplete (grade of "I") will only be given due to extenuating circumstances. What constitutes "extenuating circumstances" is left to the instructor's discretion. If a grade of I is given, the remaining coursework must be completed by a date set by the student and professor.

A student may receive a temporary grade of "I" (Incomplete) at the end of the semester only if ALL of the following conditions are satisfied:

1. The student is unable to complete the course during the semester due to circumstances beyond their control.
2. The student must have earned at least half of the grade points needed for a "C" by the end of the semester.
3. The request for the grade must be made in person at the instructor's office and the necessary documents completed.
4. To remove an "I", the student must complete the course by two weeks before the end of the following semester. Failure to do so will result in the grade automatically reverting to an "F".

Statement on Students with Disabilities

Each ACC campus offers support services for students with documented disabilities. Students with disabilities who need classroom, academic, or other accommodations must request them through the Office of Student Accessibility Services (SAS). Students are encouraged to request accommodations when they register for courses or at least three weeks before the start of the semester, otherwise, the provision of accommodations may be delayed. Students who have received approval for accommodations from SAS for this course must provide the instructor with the 'Notice of Approved Accommodations' from SAS before accommodations will be provided. Arrangements for academic accommodations can only be made after the instructor receives the 'Notice of Approved Accommodations' from the student. Students with approved accommodations are encouraged to submit the 'Notice of Approved Accommodations' to the instructor at the beginning of the semester because a reasonable amount of time may be needed to prepare and arrange for the accommodation.

Freedom of Expression Policy

It is expected that faculty and students will respect the views of others when expressed in classroom discussions.

Student Files – Privacy

Their instructor for educational and academic reasons may view the information that a student stores in his/her student volume in the Computer Studies Labs.

Health & Safety Protocols

Operational areas of ACC campuses and centers are fully open and accessible through all public entrances. The college encourages its staff, faculty, and students to be mindful of the well-being of all individuals on campus. If you feel sick, feverish, or unwell, please do not come to campus.

Some important things to remember:

- If you have not done so, ACC encourages all students, faculty, and staff to get vaccinated. COVID-19 vaccines are now widely available throughout the community. Visit Vaccines.gov to find a vaccine location near you.
- Campuses are open to faculty, staff, and students. The college and its departments and offices may invite internal *and* external guests to their events and activities, though access is still restricted for external parties seeking to host activities at ACC. The college's Appian Health Screening App remains available to everyone who visits campus. This continues to be a good way to check your health before coming to class or work.
- If you are experiencing COVID-19-related symptoms, please get a COVID-19 test as soon as possible before returning to an ACC facility. Testing is now widely available. To find testing locations near you, click this link.
- If you test positive, please report it on the ACC self-reporting tool located here.
- ACC continues to welcome face masks on campus. Per CDC guidelines, face masks remain a good way to protect yourself from COVID-19.
- The college asks that we all continue to respect the personal space of others. We are encouraging 3 feet of social distancing.
- Please be sure to carry your student, faculty, or staff ID badge at all times while on campus.
- Because of the ever-changing situation, please go to ACC's Covid website for the latest updates and guidance.

Statement on Academic Integrity

Austin Community College values academic integrity in the educational process. Acts of academic dishonesty/misconduct undermine the learning process, present a disadvantage to students who earn credit honestly and subvert the academic mission of the institution. The potential consequences of fraudulent credentials raise additional concerns for individuals and communities beyond campus who rely on institutions of higher learning to certify students' academic achievements and expect to benefit from the claimed knowledge and skills of their graduates. Students must follow all instructions given by faculty or designated college representatives when taking examinations, placement assessments, tests, quizzes, and evaluations. Actions constituting scholastic dishonesty include, but are not limited to, plagiarism, cheating, fabrication, collusion, falsifying documents, or the inappropriate use of the college's information technology resources. Further information is available on the Academic Integrity website.

Any course-specific policies, expectations, or procedures could be included here.

Student Rights & Responsibilities

Students at ACC have the same rights and protections under the Constitution of the United States. These rights include freedom of speech, peaceful assembly, petition, and association. As members of the community, students have the right to express their views, but must also take responsibility for the same rights to others and not interfere with or disrupt the learning environment. Students are entitled to fair treatment, are expected to act consistently with the values of the college and obey local, state, and federal laws. Student Rights & Responsibilities.

As a student of Austin Community College, you are expected to abide by the Student Standards of Conduct.

Senate Bill 212 and Title IX Reporting Requirements

Under Senate Bill 212 (SB 212), the faculty and all College employees are required to report any information concerning incidents of **sexual harassment, sexual assault, dating violence, and stalking** committed by or against an ACC student or employee. Federal Title IX law and College policy also require reporting incidents of **sex- and gender-based discrimination and sexual misconduct**. **This means faculty and non-clinical counseling staff cannot keep confidential information about any such incidents that you share with them.**

If you would like to talk with someone with confidentiality, please contact the District Clinical Counseling Team who can connect you with a clinical counselor on any ACC campus: (512) 223-2616, or to schedule online, go to the Counseling website.

While students are not required to report, they are encouraged to contact the Compliance Office for resources and options. Charlene Buckley, District Title IX Officer, (512) 223-7964; compliance@austincc.edu .

If a student makes a report to a faculty member, the faculty member will contact the District Title IX Officer for follow-up.

Student Complaints

A defined process applies to complaints about an instructor or other college employee. You are encouraged to discuss concerns and complaints with college personnel and should expect a timely and appropriate response. When possible, students should first address their concerns through informal conferences with those immediately involved; formal due process is available when informal resolution cannot be achieved.

Student complaints may include (but are not limited to) issues regarding classroom instruction, college services, and offices based on actual or perceived race, color, national origin, religion, age, gender, gender identity, sexual orientation, political affiliation, or disability.

Further information about the complaints process, including the form used to submit complaints, is available at the Student Complaint Procedures website.

Statement on Privacy

The Family Educational Rights and Privacy Act (FERPA) protects the confidentiality of students' educational records. Grades cannot be provided by faculty over the phone, by e-mail, or by a fellow student.

Recording Policy

To ensure compliance with the Family Education Rights and Privacy Act (FERPA), student recording of class lectures or other activities is generally prohibited without the explicit written permission of the instructor and notification of other students enrolled in the class section. Exceptions are made for approved accommodations under the Americans with Disabilities Act.

Recording of lectures and other class activities may be made by faculty to facilitate instruction, especially for classes taught remotely through Blackboard Collaborate or another platform. Participation in such activities implies consent for the student to be recorded during the instructional activity. Such recordings are intended for educational and academic purposes only.

Safety Statement

Health and safety are of paramount importance in classrooms, laboratories, and field activities. Students are expected to learn and comply with ACC environmental, health, and safety procedures and agree to follow ACC safety policies. Emergency Procedures posters and Campus Safety Plans are posted in each classroom and should be reviewed at the beginning of each semester. All incidents (injuries/illness/fire/property damage/near misses) should be immediately reported to the course instructor. Additional information about safety procedures and how to sign up to be notified in case of an emergency can be found onthe Emergency Management website. Everyone is expected to conduct themselves professionally with respect and courtesy to all. Anyone who thoughtlessly or intentionally jeopardizes the health or safety of another individual may be immediately dismissed from the day's activity and will be referred to the Dean of Student Services for disciplinary action.

In the event of disruption of normal classroom activities due to an emergency or an outbreak of illness, the format for this course may be modified to enable completion of the course. In that event, students will be provided an addendum to the class syllabus that will supersede the original version.

Campus Carry

The Austin Community College District concealed handgun policy ensures compliance with Section 411.2031 of the Texas Government Code (also known as the Campus Carry Law) while maintaining ACC's commitment to providing a safe environment for its students, faculty, staff, and visitors. Beginning August 1, 2017, individuals who are licensed to carry (LTC) may do so on campus premises except in locations and at activities prohibited by state or federal law, or the college's concealed handgun policy.

It is the responsibility of license holders to conceal their handguns at all times. Persons who see a handgun on campus are asked to contact the ACC Police Department by dialing 512-223-1231. Please refer to the concealed handgun policy online at the Campus Carry website.

Discrimination Prohibited

The College seeks to maintain an educational environment free from any form of discrimination or harassment including but not limited to discrimination or harassment based on race, color, national origin, religion, age, sex, gender, sexual orientation, gender identity, or disability.

Faculty at the College are required to report concerns regarding sexual misconduct (including all forms of sexual harassment and sex and gender-based discrimination) to the Manager of Title IX/Title VI/ADA Compliance. Licensed clinical counselors are available across the District and serve as confidential resources for students.

Additional information about Title VI, Title IX, and ADA compliance can be found in the ACC Compliance Resource Guide.

Use of ACC email

All College e-mail communication to students will be sent solely to the student's ACCmail account, with the expectation that such communications will be read in a timely fashion. ACC will send important information and will notify students of any college-related emergencies using this account. Students should only expect to receive email communication from their instructor using this account. Likewise, students should use their ACCmail account when communicating with instructors and staff. Information about ACC email accounts, including instructions for accessing them, is available on the ACC Email Q&A website.

Use of the Testing Center

The Testing Centers will allow only limited in-person testing and testing time will be limited to the standard class time, typically one and one-half hours. Specifically, only the following will be allowed in the Testing Centers:

- Student Accessibility Services (SAS) Testing: All approved SAS testing
- Assessments Tests: Institutionally approved assessment tests (e.g., TSIA or TABE)
- Placement Tests: Placement tests (e.g., ALEKS)
- Make-Up Exams (for students who missed the original test): Make-up testing is available for all lecture courses but will be limited to no more than 25% of students enrolled in each section for each of the four tests
- Programs incorporating industry certification exams: Such programs (e.g., Microsoft, Adobe, etc.) may utilize the ACC Business Assessment Center for the industry certification exams (BACT) at HLC or RRC

The instructor should provide additional information about how they will conduct examinations and other assessments here.

STUDENT SUPPORT SERVICES

The success of our students is paramount, and ACC offers a variety of support services to help, as well as providing numerous opportunities for community engagement and personal growth.

Student Support

ACC strives to provide exemplary support to its students and offers a broad variety of opportunities and services. Information on these campus services and resources is available at the Student Resources website. A comprehensive array of student support services is available online at the Student Support website.

Student Accessibility Services

Austin Community College (ACC) is committed to providing a supportive, accessible, and inclusive learning environment for all students. Each campus offers support services for students with documented disabilities. Students with disabilities who need classroom, academic, or other accommodations must request them through Student Accessibility Services (SAS).

Students are encouraged to request accommodations before the beginning of the semester, otherwise the provision of accommodations may be delayed. Students who have received accommodations from SAS for this course will provide the instructor with the legal document titled "Faculty Notification Letter" (FNL) through the Accessible Information Management (AIM) portal.

Until the instructor receives the FNL, accommodations should not be provided. Once the FNL is received, accommodations must be provided. Accommodations are not retroactive, so it is in the student's best interest to request their accommodations as soon as possible before the beginning of the semester.

Please contact SAS@austincc.edu for more information.

Academic Support

ACC offers academic support services on all its campuses. These services, which include online tutoring, academic coaching, and supplemental instruction, are free to enrolled ACC students. Tutors are available in a variety of subjects ranging from accounting to pharmacology. Students may receive these services on both a drop-in and referral basis.

An online tutor request can be made here: Online Tutoring Request

Additional tutoring information can be found here: Online Tutoring

Library Services

ACC Library Services offers both in-person and extensive online services, with research and assignment assistance available in person during limited hours of service. Although all college services are subject to change, plans include ACC students signing up for study space and use of computers at open libraries, extensive online instruction in classes, online reference assistance

24/7, and reference with ACC faculty librarians. In addition, currently enrolled students, faculty, and staff can access Library Services online (also 24/7) via the ACC Library website and by using their ACCeID to access all online materials (ebooks, articles from library databases, and streaming videos). ACC Libraries offer these services in numerous ways such as: "Get Help from a Faculty Librarian: the 24/7 Ask a Librarian chat service," an online form for in-depth research Q and A sessions, one-on-one video appointments, email, and phone (voicemail is monitored regularly).

- Library Website
- Library Information & Services during COVID-19
- Ask a Librarian 24/7 chat and form
- Library Hours of Operation by Location
- Email: library@austincc.edu

Parent and Family Engagement Services

ACC understands how important parent and family support is to every student's college journey. From parents and siblings to stepparents, grandparents, partners, and loved ones, the Parent and Family Engagement Office at ACC is committed to empowering families to support student success. The office provides a family orientation to ACC, free workshops explaining the world of higher education (financial aid, student resources, career and transfer services, etc.), a monthly newsletter full of student success tips, and a website designed to answer family members' frequently asked questions. All students, especially first-generation students, are encouraged to share these resources with their families and invite them to be part of the Riverbat experience. Contact familyengagement@austincc.edu or visit the Parent & Family Engagement website for more information.

Student Organizations

ACC has over seventy student organizations, offering a variety of cultural, academic, vocational, and social opportunities. They provide a chance to meet with other students who have the same interests, engage in service-learning, participate in intramural sports, gain valuable field experience related to career goals, and much else. Student Life coordinates many of these activities, and additional information is available at the Student Life website.

Personal Support

Resources to support students are available at every campus. To learn more, ask your professor or visit the campus Support Center. All resources and services are free and confidential. Some examples include, among others:

- Food resources including community pantries and bank drives can be found here at the Central Texas Food Bank website.
- Assistance with childcare or utility bills is available at any campus Support Center.
- The Student Emergency Fund can help with unexpected expenses that may cause you to withdraw from one or more classes.
- Help with budgeting for college and family life is available through the Student Money Management Office.

- A full listing of services for student parents is available on the Child Care website.

Mental health counseling services are available throughout the ACC Student Services District to address personal and or mental health concerns at the Counseling website.

If you are struggling with a mental health or personal crisis, call one of the following numbers to connect with resources for help. However, if you are afraid that you might hurt yourself or someone else, call 911 immediately.

Free Crisis Hotline Numbers:

- Austin / Travis County 24-hour Crisis & Suicide hotline: **512-472-HELP (4357)**
- The Williamson County 24-hour Crisis hotline: **1-800-841-1255**
- Bastrop County Family Crisis Center hotline: **1-888-311-7755**
- Hays County 24-Hour Crisis Hotline: **1-877-466-0660**
- National Suicide Prevention Lifeline: **988** or **1-800-273-TALK (8255)**
- Crisis Text Line: **Text "home" to 741741**
- Substance Abuse and Mental Health Services Administration (SAMHSA) National Helpline: **1-800-662-HELP (4357)**
- National Alliance on Mental Illness (NAMI) Helpline:**1-800-950-NAMI (6264)**

Some faculty may consider adding a student sign-off page at the end of the syllabus to be removed and handed back to the instructor providing evidence that the student received a copy of the syllabus and had an opportunity to ask questions, but such a page is optional.