**Catalog Description**

Provides a self-paced, comprehensive review of concepts essential to understand computer information systems. Open only to students with transfer credit comparable to IT 104 who have not attempted IT 104 or IT 191.

**Prerequisites**

Permission of department. Students must have transferred a course comparable to IT 104 in order to be eligible to register for this course. For VCCS students, this course is typically ITE 115.

This requirement will be **strictly enforced**. Any student who does not meet the prerequisite requirement will not be permitted to enroll in the course.

**Rationale**

Almost no area of academic, professional, or personal life is untouched by the information technology revolution. Success in college and beyond requires computer and information literacies that are flexible enough to change with a changing IT environment and adaptable to new problems and tasks. The purpose of the information technology requirement is to ensure that students achieve an essential understanding of information technology infrastructure encompassing systems and devices; learn to make the most of the Web and other network resources; protect their digital data and devices; take advantage of latest technologies; and become more sophisticated technology users and consumers.

This course provides a pathway for students that have previously taken a course comparable to IT 104, but were denied direct equivalency to IT 104 to review materials and reinforce what was learned in the prior course. From this learning they should be able to demonstrate a level of proficiency equivalent to students completing IT 104 which will prepare the student for higher level AIT courses.
Course Outcomes

1. Understand basic functions of computer hardware, network, and software components.
2. Know how to use search techniques (inclusion, exclusion, wildcards, phrase, Boolean search), evaluate the information found on Web pages (chat rooms, newsgroups, RSS, podcasting sites, Wikipedia, blogs), and cite electronic and printed references.
3. Understand information security, ethics, and privacy issues and concerns.
4. Understand IT impact on society (health and environment)
5. Design and create web pages using HTML 5.
6. Create blogs and wikis.
7. Create mobile app using AppInventor.
8. Learn to program in Alice programming environment.
9. Understand the fundamentals of system analysis, life cycle of a program development and programming languages, artificial intelligence, and e-commerce.

Supported Student Outcomes

(i) Ability to use current techniques, skills, and tools necessary for computing practices.

Outcomes at the Program Level

Textbooks

There are two required textbooks for the course.


http://www.khwebcom.com/fundofcomputing/
Administrative Support

Fairfax campus
http://eagle.gmu.edu/map/buildings/engineering.php, Room 5400
Phone: 703-993-3565

Grading

Grades will be awarded in accordance with the GMU Grading System for undergraduate students. See the university catalog for policies: http://catalog.gmu.edu for more information.

The grading scale for this course is:

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>73 – 100%</td>
<td>S</td>
<td>Passing/Satisfactory</td>
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<tr>
<td>0 – 72%</td>
<td>NC</td>
<td>Failing/No Credit</td>
</tr>
</tbody>
</table>

Raw scores may be adjusted by the instructor to calculate final grades.

Final grades will be determined based on the following components:

<table>
<thead>
<tr>
<th>Graded Activity</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Final Exam</td>
<td>50%</td>
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<tr>
<td>Quizzes (10)</td>
<td>50%</td>
</tr>
</tbody>
</table>

There are no extra credit opportunities. Students may not do additional work nor resubmit any graded activity to raise a final grade.

The 10 quizzes and final exam will be conducted on grtep.com assessment tool that is included in the lecture textbook.

Final grades will be posted to PatriotWeb, which is the only vehicle for students to obtain those grades. A student with a "hold" on his/her PatriotWeb account will be unable to access final grades until the hold has been removed by the Registrar.
Course Content

<table>
<thead>
<tr>
<th>Module</th>
<th>Content</th>
<th>Quizzes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Internet &amp; World Wide Web</td>
<td>Quiz 1</td>
</tr>
<tr>
<td>2</td>
<td>Hardware</td>
<td>Quiz 2</td>
</tr>
<tr>
<td>3</td>
<td>Software</td>
<td>Quiz 3</td>
</tr>
<tr>
<td>4</td>
<td>Data Communications &amp; Networking</td>
<td>Quiz 4</td>
</tr>
<tr>
<td>5</td>
<td>Systems Analysis</td>
<td>Quiz 5</td>
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<tr>
<td>6</td>
<td>HTML 5</td>
<td>Quiz 6</td>
</tr>
<tr>
<td>7</td>
<td>HTML 5</td>
<td>Quiz 7</td>
</tr>
<tr>
<td>8</td>
<td>Computer Programming</td>
<td>Quiz 8</td>
</tr>
<tr>
<td>9</td>
<td>Database &amp; SQL</td>
<td></td>
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<tr>
<td>10</td>
<td>E-Commerce</td>
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<tr>
<td>11</td>
<td>Security, Ethics, &amp; Privacy</td>
<td>Quiz 9</td>
</tr>
<tr>
<td>12</td>
<td>Artificial Intelligence</td>
<td>Quiz 10</td>
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<td></td>
<td>Future of Computing</td>
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<tr>
<td></td>
<td>Impact of Computing on Society</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Module 1 – 13 Review</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Final Exam Review / Final Exam</td>
<td></td>
</tr>
</tbody>
</table>

Important Dates

Dates for adding, dropping the course, etc. are available via: [http://registrar.gmu.edu](http://registrar.gmu.edu).

Religious Holidays

A list of religious holidays is available on the University Life Calendar page. Any student whose religious observance conflicts with a scheduled course activity must contact the instructor at least 2 weeks in advance of the conflict date in order to make alternative arrangements.

Attendance Policy

This course is a self-paced course with no graded assignments other than a final exam. Students are strongly recommended to follow the course schedule to ensure they remain on target to successfully complete the course.
Departmental policy requires students to take exams at the scheduled time and place, unless there are truly compelling, severe circumstances supported by appropriate documentation. Except in such circumstances, failure to arrive to the exam site on time for a scheduled exam will result in a score of zero (0) for that exam, in accordance with Mason policy on final exams. Students should not make travel plans or other discretionary arrangements that conflict with scheduled classes and/or exams. If the University is closed due to weather or other unforeseen conditions, final exams may be rescheduled – students are strongly advised not to make plans that would prevent them from attending exams that may be rescheduled during the entire exam period.

**Communications**

Registered students will be given access to a section of the Blackboard Learning System for this course. Blackboard will used as the primary mechanism to disseminate course information, including announcements, lecture slides, and grades.

Communication with the instructor on issues relating to the individual student should be conducted using Blackboard Mail, GMU email, via telephone, or in person - not in the public forums on Blackboard. GMU Mail is the preferred method – for urgent messages, you should also attempt to contact the instructor via telephone. Federal privacy law and GMU policy require that any communication with a student related in any way to a student's status be conducted using secure GMU systems – if you use email to communicate with the instructor you **MUST** send messages from your GMU email account.

**Privacy**

Instructors respect and protect the privacy of information related to individual students. As described above, issues relating to an individual student will discussed via email, telephone or in person. Instructors will not discuss issues relating to an individual student with other students (or anyone without a need to know) without prior permission of the student.

Faculty and staff will take care to protect the privacy of each student’s scores and grades.

**Disability Accommodations**

The Office of Disability Services (ODS) works with disabled students to arrange for appropriate accommodations to ensure equal access to university services. Any student with a disability of any kind is strongly encouraged to register with ODS as soon as possible and take advantage of the services offered.

Accommodations for disabled students **must** be made in advance – ODS cannot assist students retroactively, and at least one week's notice is required for special accommodations related to exams. Any student who needs accommodation should contact the instructor during the first week of the semester so the sufficient time is allowed to make arrangements.
Honor Code

All members of the Mason community are expected to uphold the principles of scholarly ethics. Similarly, graduating students are bound by the ethical requirements of the professional communities they join. The ethics requirements for some of the communities relevant to Applied IT graduates are available via the following links:

- ACM Code of Ethics and Professional Conduct
- IEEE Code of Ethics
- EC-Council Code of Ethics

On admission to Mason, students agree to comply with the requirements of the GMU Honor System and Code. The Honor Code will be strictly enforced in this course. Honor Code cases are heard by a panel consisting of students – students who meet the requirements are encouraged to nominate themselves to serve on the Honor Committee. Any use of the words or ideas of another person(s), without explicit attribution that clearly identifies the material used and its source in an appropriate manner, is plagiarism and will not be tolerated. Within The Volgenau School there is a mandated "zero tolerance" policy for plagiarism. The instructor reserves the right to use all manual and/or automated means (including, but not limited to such services as SafeAssign and MOSS – Measure of Software Similarity) to detect plagiarism in any work submitted by students for this course, and to direct teaching assistants and/or other faculty and/or staff members to do likewise in support of this course. Additional information on the enforcement of the George Mason University Honor Code policy can be found at: http://academicintegrity.gmu.edu.

For this course, the following additional requirements are specified:

- All work that is to be submitted for a grade must be prepared by the individual student. Students are expressly prohibited from sharing any work that is to be submitted for a grade for this course in any manner with anyone other than the instructor and teaching assistant(s) assigned to this course and the student's section).

- Students may not post or share course content (i.e. instructor provided lecture notes, assignment directions, assignment questions, or anything not created solely by the student), using any non-electronic or electronic medium (i.e. web site, FTP site, any location where it is accessible to someone other than the individual student, instructor and/or teaching assistant(s)). Such action constitutes copyright infringement and is strictly prohibited without prior approval from the instructor.

If you have questions on these requirements, please discuss them with your instructor. Any deviation from these requirements is considered a violation of the Honor Code. All suspected violations of the Honor Code will be taken seriously and are required to be reported by the instructor.