Instructor
Tanes Kanchanawanchai
Office: CG211-D
Telephone: 703-425-5127
Email: tkanchanawanchai@nvcc.edu

Office Hours
Tuesday/ Thursday from 2pm to 6pm Room CG-211D
Or by appointment

Policies
- All programming projects and assignments must be compiled before submitting. Not-compiled assignments and projects will not be graded.
- Copy and paste the result of the program in MS. Word document. Submit both the program and the screen capture of the result.
- Students are responsible for abiding by the Plagiarism Policy.
- Make-up exams will not be graded. Late assignments will not be accepted.
- You are required to visit my website or the blackboard daily for the latest class information.
- click here for link to academic information in nova catalog 2011-2012.
- click here for link to faq's on the inclement weather policy.
- click here for link to important dates.
- Fire/emergency evacuation procedures: "in case of emergency, please follow the emergency procedure as discussed on the first day of class and as posted in the classroom."

Important Dates

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
<tr>
<td>Class begins</td>
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<tr>
<td>Labor day holiday</td>
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<tr>
<td>Last day for schedule adjustments with tuition refund</td>
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<tr>
<td>Non-instructional days/no classes; College offices open</td>
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<tr>
<td>Last day to withdraw without grade penalty or change to audit</td>
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<tr>
<td>Non-instructional days/no classes; College closes at Noon</td>
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<tr>
<td>Thanksgiving Holiday</td>
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<tr>
<td>Non-instructional days/no classes</td>
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<tr>
<td>Last day of class</td>
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<tr>
<td>Final Exam from 12:00 PM to 1:50 PM Room CT-0121</td>
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Course Description
Introduces problem solving through computer applications and via a programming language. Examines development of computers, social and ethical implications of computers, and properties of programming languages. Covers input, storage, data manipulation, software and hardware.

Course Objectives
Upon completion of this course, the student will be able to:

- Identify, explain the purpose of, and use the basic hardware components of a personal, desktop computer system.
- Identify several tasks for which an operating system is responsible.
- Use a file utility program to copy, move, and delete files and make and delete subdirectories.
- Understand the basic difference between system software and application software.
- Application Software – use application programs at the basic/introductory level for the following applications: Word processing, Spreadsheets, Database manipulation, Email, Network browsing.
- Send and receive email.
- Use an Internet browser program to connect to web sites and retrieve information
- Use elementary control structures and/or elementary event-handling constructs of a programming language to write an elementary computer program.
- Solve an elementary problem by use of a computer and a programming language.
- Cite several ways that computers are changing the way we do things in our society.
- State activities against which a user must protect him/herself when using a computer in conjunction with the Internet.

Prerequisite
This course is valuable for anyone interested in developing their computer knowledge. No experience is required for enrollment. Previous experience with Microsoft Windows and some facility in typing on a computer keyboard will certainly be helpful.

Course Designed to Serve
This course is an introduction to computer science, intended especially but not exclusively for science majors. It satisfies the college computing requirement for a science major A.S. degree, and satisfies the computer programming requirement for a Virginia math teaching endorsement.

Readings, Web-sites and Internet Links
http://www.w3schools.com/
There will be additional web-sites and internet links on blackboard.
## Course Outline and Calendar

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Essential Work</th>
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</thead>
</table>
| 1    | Introduction to Computers  
- History  
- Hardware  
- Software  
- Internal representation  
- Role in society  
- Ethical use of computers | Assignment 1 |
| 2    | Operating System  
- Environment  
- Files  
  - Creation  
  - Management  
- Graphical User Interfaces | Quiz 1 |
| 3, 4, & 5 | Computer Communication  
- E-mail / Outlook  
- Internet  
Web Page Creation  
- HTML  
- CSS  
- Hosting/ftp | Project 1 |
| 6    | Word Processing  
- Document creation  
- Editing  
- Formatting | Assignment 2 |
| 7 & 8 | Spreadsheet  
- Creation  
- Modification  
- Graphs | Assignment 3, Quiz 2 |
| 9 & 10 | Database  
- Creation  
- Querying  
- Simple Forms and Reports | Project 2 |
| 11, 12, 13, & 14 | Programming  
- Problem Solving  
- Programming Methodologies  
- Algorithms  
- Programming Constructs  
  - Simple data types  
  - Input/Output | Assignment 4, Quiz 3, Project 3 |
Course Evaluation and Grading

Evaluation Criteria Table
The final grades will be based on the following categories:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>WEIGHT</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Quizzes</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Projects</td>
<td>35</td>
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<tr>
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<td></td>
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<tr>
<td>Total</td>
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Grade Scale

<table>
<thead>
<tr>
<th>Score (%)</th>
<th>Grade</th>
</tr>
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<tbody>
<tr>
<td>90-100</td>
<td>A</td>
</tr>
<tr>
<td>80-89</td>
<td>B</td>
</tr>
<tr>
<td>70-79</td>
<td>C</td>
</tr>
<tr>
<td>60-69</td>
<td>D</td>
</tr>
<tr>
<td>Below 60</td>
<td>F</td>
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