Introduction to Computing Technology

CSE 1110

Credit Hours:
3.00

Course Coordinator:

Course Length:
14 weeks (autumn or spring)
12 weeks (summer only)
7 weeks (autumn or spring)

Representative Textbooks and Other Course Materials:

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discovering Computers 2008</td>
<td>Shelly, Cashman, Vermaat</td>
<td></td>
</tr>
<tr>
<td>Office 2007: Brief Concepts and Techniques</td>
<td>Shelly, Cashman, Vermaat</td>
<td></td>
</tr>
<tr>
<td>Brief Edition</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Course Description:
A course of general interest giving experience with personal computer software, e.g., word processors and spreadsheets; provides fundamental computer literacy; neither teaches nor requires programming.

Designation:
Elective
Course Goals / Objectives:
Be competent with understanding the role of computers in our society
Be competent with using four of the most popular kinds of software on the market: spreadsheets, database managers, presentation graphics, and word-processing
Be familiar with using computer hardware by understanding how instructions are executed, information is input/output, binary no. system, storage devices, telecommunications
Be familiar with using the computer as a tool for problem solving in many areas: business, manufacturing, medicine, art, education, the military, government, etc
Be familiar with how computers have evolved, the history of the computer industry, and the dramatic speed at which computer technology has evolved and continues to do so
Be familiar with security issues, computer crime, the implications of natural disasters on computers, inadvertent tampering, and what can be done about each
Be exposed to social and ethical issues, including new social and ethical questions that need to be addressed because of computer technology
Be exposed to language issues, syntax and semantics, difficulties in using spoken languages for computers, what programming languages are, and what steps are involved in creating computer software

ABET-CAC Criterion 3 Outcomes:

<table>
<thead>
<tr>
<th>Some contribution (1-2 hours)</th>
<th>1</th>
<th>Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substantial contribution (3-6 hours)</td>
<td>4</td>
<td>Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles</td>
</tr>
<tr>
<td>Some contribution (1-2 hours)</td>
<td>6</td>
<td>Apply computer science theory and software development fundamentals to produce computing-based solutions.</td>
</tr>
</tbody>
</table>

ABET-EAC Criterion 3 Outcomes:

No outcome selected
### Course Topics:

- Computers in society; word processing
- Application software
- The components of the system unit; spreadsheet application
- Operating systems and utility programs
- Computing input devices
- Computing output devices
- Storage technology; database software
- Database management; communications and networks
- Computers and society, security, privacy, and ethics; presentation software