



MIDDLE SCHOOL COURSE OUTLINE

Department	Technology			
Course Title	Computers Intermediate	Course Code	1338	
Abbreviation	Computers Intermed	Grade Level	6-8	
Course Length	1 semester	Required		Elective Yes
Prerequisites	Grade C or better in Computers Introduction or demonstration of proficiency in Computer Introduction skills.			

COURSE DESCRIPTION:

This elective will build on previously learned computer skills. Skills learned in Introduction to Computers will be reinforced and the next level of skills will be introduced including database skills and the development of spreadsheets. Students will continue to practice word-processing skills through the semester and will improve their speed and accuracy. Students will use appropriate terminology related to hardware and software throughout the semester. Students will apply technology skills to conduct research and complete core curriculum projects. They will continue to deal with legal, social and ethical issues related to the use of computers in our daily life. This course will prepare students for the advanced level of technology in middle school.

GOALS: National Educational Technology Standards for Students

- 1. Basic operations and concepts**
 - Students demonstrate a sound understanding of the nature and operation of technology systems
 - Students are proficient in the use of technology
- 2. Social, ethical and human issues**
 - Students understand the ethical, cultural, and societal issues related to technology
 - Students practice responsible use of technology systems, information, and software
 - Students develop positive attitudes towards technology uses that support lifelong learning, collaboration, personal pursuits, and productivity
- 3. Technology productivity tools**
 - Students use technology tools to enhance learning, increase productivity, and promote creativity
 - Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works
- 4. Technology communication tools**
 - Students use technology to collaborate, publish, and interact with peers, experts, and other audiences
 - Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences
- 5. Technology research tools**
 - Students use technology to locate, evaluate, and collect information from a variety of sources
 - Students use technology tools to process data and report results
 - Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks

6. Technology problem-solving and decision-making tools

- Students use technology resources for solving problems and making informed decisions
- Students employ technology in the development of strategies for solving problems in the real world

PERFORMANCE CRITERIA

Evaluation will be based on student performance on the various applications being taught in the course. Assessments will include speed and accuracy tests for keyboarding, and project portfolios that display proficiency in word-processing. Students who receive a grade of C or D are considered partially proficient in the skills taught in this course. A “C” indicates that the student has sufficient skills to move on to the next level, whereas a “D” indicates that the student needs more development of foundational skills.

Applications	Advanced Proficient	Proficient	Partially Proficient		Not Proficient
	A	B	C	D	F
Word Processing	Demonstrates a high level of skill in – <ul style="list-style-type: none"> ➤ Creating, inserting and resizing graphics ➤ Using columns, borders and shading ➤ Inserting page and section breaks ➤ Using the Drawing toolbar options ➤ Deleting, copying and pasting text ➤ Using the thesaurus 	Without making significant errors is able to - <ul style="list-style-type: none"> ➤ Create, insert and resize graphics ➤ Use columns, borders and shading ➤ Inserts page and section breaks ➤ Use the Drawing toolbar options ➤ Delete, copy and paste text ➤ Use the thesaurus 	Makes some errors when - <ul style="list-style-type: none"> ➤ Creating, inserting and resizing graphics ➤ Using columns, borders and shading ➤ Inserting page and section breaks ➤ Using the Drawing toolbar options ➤ Deleting, copying and pasting text ➤ Using the thesaurus 	Makes several errors when - <ul style="list-style-type: none"> ➤ Creating, inserting and resizing graphics ➤ Using columns, borders and shading ➤ Inserting page and section breaks ➤ Using the Drawing toolbar options ➤ Deleting, copying and pasting text ➤ Using the thesaurus 	Unable to - <ul style="list-style-type: none"> ➤ Create, insert and resize graphics ➤ Use columns, borders and shading ➤ Inserts page and section breaks ➤ Use the Drawing toolbar options ➤ Delete, copy and paste text ➤ Use the thesaurus
Spreadsheet	Demonstrates a high level of skill in – <ul style="list-style-type: none"> ➤ Adding, deleting, moving rows and columns ➤ Merging cells ➤ Setting cell attributes ➤ Enhancing cells using border and shading tools ➤ Using the FILL option 	Without making significant errors is able to - <ul style="list-style-type: none"> ➤ Add, delete, move rows and columns ➤ Merge cells ➤ Set cell attributes ➤ Enhance cells using border and shading tools ➤ Use the FILL option 	Makes some errors in- <ul style="list-style-type: none"> ➤ Adding, deleting, moving rows and columns ➤ Merging cells ➤ Setting cell attributes ➤ Enhancing cells using border and shading tools ➤ Using the FILL option 	Makes several errors in - <ul style="list-style-type: none"> ➤ Adding, deleting, moving rows and columns ➤ Merging cells ➤ Setting cell attributes ➤ Enhancing cells using border and shading tools ➤ Using the FILL option 	Unable to - <ul style="list-style-type: none"> ➤ Add, delete, move rows and columns ➤ Merge cells ➤ Set cell attributes ➤ Enhance cells using border and shading tools ➤ Use the FILL option
Multimedia	Demonstrates a high level of skill in – <ul style="list-style-type: none"> ➤ Customizing backgrounds and layouts ➤ Using hyperlinks to other presentations, web-sites and documents 	Without making significant errors is able to – <ul style="list-style-type: none"> ➤ Customize backgrounds and layouts ➤ Use hyperlinks to other presentations, web-sites and documents 	Makes some errors in- <ul style="list-style-type: none"> ➤ Customizing backgrounds and layouts ➤ Using hyperlinks to other presentations, web-sites and documents 	Makes several errors in – <ul style="list-style-type: none"> ➤ Customizing backgrounds and layouts ➤ Using hyperlinks to other presentations, web-sites and documents 	Unable to – <ul style="list-style-type: none"> ➤ Customize backgrounds and layouts ➤ Use hyperlinks to other presentations, web-sites and documents

Applications	Advanced Proficient	Proficient	Partially Proficient		Not Proficient
	A	B	C	D	F
Research	Demonstrates a high level of skill in – <ul style="list-style-type: none"> ➤ Identifying appropriate resources ➤ Identifying useful information for research ➤ Evaluating resources for accuracy, relevance, appropriateness and bias ➤ Comparing information from at least two sources ➤ Taking notes and paraphrasing ➤ Citing electronic resources for bibliography 	Without making significant errors is able to – <ul style="list-style-type: none"> ➤ Identify appropriate resources ➤ Identify useful information for research ➤ Evaluate resources for accuracy, relevance, appropriateness and bias ➤ Compare information from at least two sources ➤ Take notes and paraphrasing ➤ Cite electronic resources for bibliography 	Makes some errors in- <ul style="list-style-type: none"> ➤ Identifying appropriate resources ➤ Identifying useful information for research ➤ Evaluating resources for accuracy, relevance, appropriateness and bias ➤ Comparing information from at least two sources ➤ Taking notes and paraphrasing ➤ Citing electronic resources for bibliography 	Makes several errors in – <ul style="list-style-type: none"> ➤ Identifying appropriate resources ➤ Identifying useful information for research ➤ Evaluating resources for accuracy, relevance, appropriateness and bias ➤ Comparing information from at least two sources ➤ Taking notes and paraphrasing ➤ Citing electronic resources for bibliography 	Unable to – <ul style="list-style-type: none"> ➤ Identify appropriate resources ➤ Identify useful information for research ➤ Evaluate resources for accuracy, relevance, appropriateness and bias ➤ Compare information from at least two sources ➤ Take notes and paraphrasing ➤ Cite electronic resources for bibliography
Database	Demonstrates a high level of skill in – <ul style="list-style-type: none"> ➤ Naming fields ➤ Setting field attributes ➤ Entering data in consistent form ➤ Editing and sorting data ➤ Mail merging into labels and documents ➤ Searching for information by using specific field criteria 	Without making significant errors is able to – <ul style="list-style-type: none"> ➤ Name fields ➤ Set field attributes ➤ Enter data in consistent form ➤ Edit and sort data ➤ Mail merge into labels and documents ➤ Search for information by using specific field criteria 	Makes some errors in- <ul style="list-style-type: none"> ➤ Naming fields ➤ Setting field attributes ➤ Entering data in consistent form ➤ Editing and sorting data ➤ Mail merging into labels and documents ➤ Searching for information by using specific field criteria 	Makes several errors in – <ul style="list-style-type: none"> ➤ Naming fields ➤ Setting field attributes ➤ Entering data in consistent form ➤ Editing and sorting data ➤ Mail merging into labels and documents ➤ Searching for information by using specific field criteria 	Unable to – <ul style="list-style-type: none"> ➤ Name fields ➤ Set field attributes ➤ Enter data in consistent form ➤ Edit and sort data ➤ Mail merge into labels and documents ➤ Search for information by using specific field criteria

OUTLINE OF CONTENT AND TIME ALLOTMENT: (18 weeks)

The course of study includes skills in using and applying various applications. The skills covered in this course are foundational computer skills based on the National Educational Technology Standards for Students. The sequencing and time allotments are recommendations and may be modified to meet student needs.

Application	NETS Standard	Skills	Time
Introduction and Keyboarding (Review)	<i>Basic operations and concepts</i> Nature and operation of technology systems 3. <i>Productivity tools</i> Use productivity tools to enhance learning, increase productivity	Review how to operate a multi-media computer Care and appropriate use of hardware/peripherals Review keyboarding Review file management, desktop set-up	2 weeks

Application	NETS Standard	Skills	Time
Word Processing	<p><i>3. Productivity tools</i> Use productivity tools to enhance learning, increase productivity</p>	<p>Students will use the <u>Introduction to Computers</u> word-processing skills to create desktop publishing documents e.g. newsletters, flyers, ads, brochures, pamphlets, etc. They will also learn new skills which include:</p> <ul style="list-style-type: none"> — Create, insert, and resize graphics — Use columns, borders and shading — Insert page and section breaks — Use the drawing toolbar options — Students will learn editing skills, which include: <ul style="list-style-type: none"> — Delete, cut, copy, paste text — Spell-check, thesaurus 	4 weeks
Spreadsheet	<p><i>3. Productivity tools</i> Use productivity tools to enhance learning, increase productivity</p>	<p>Students will learn new spreadsheet skills which include:</p> <ul style="list-style-type: none"> — Add, delete, move rows and columns — Merge cells — Set cell attributes (percent, number, date, currency etc.) — Enhance cells using border and shading tools — Use fill options 	2 weeks
Multi-media	<p><i>4. Technology communication tools</i> Students use technology to collaborate, publish, and interact with peers, experts, and other audiences Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences</p>	<p>Students will use <u>Introduction to Computers</u> multi-media skills to create a presentation and learn new skills to enhance the presentation by:</p> <ul style="list-style-type: none"> — Customizing backgrounds and layouts — Using hyperlinks to other presentations, web-sites, documents etc. 	3 weeks
Research & Legal Issues (Review)	<p><i>Social, ethical and human issues</i> Ethical, cultural, societal issues Responsible use of technology systems, information & software</p> <p><i>4. Technology research tools -</i> Students use technology to locate, evaluate, and collect information from a variety of sources Students use technology tools to process data and report results Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks</p>	<p>Review</p> <ul style="list-style-type: none"> — Legal, ethical, copyright issues — District Acceptable Use Policy — Privacy/safety issues — Citation of sources <p>Students will conduct research using electronic resources using the following skills:</p> <ul style="list-style-type: none"> — Identify appropriate resources — Identify useful information for research — Evaluate for accuracy, relevance, appropriateness and bias — Compare information from at least two sources — Take notes and paraphrase — Cite electronic resources for bibliography 	3 weeks

Application	NETS Standard	Skills	Time
Database	3. <i>Productivity tools</i> Use productivity tools to enhance learning, increase productivity	Students will plan and create a simple database using the following skills: <ul style="list-style-type: none"> — Name fields — Set field attributes — Enter data in consistent form — Edit and sort data as needed. Students will use the database to: <ul style="list-style-type: none"> — Mail merge into labels and word processing documents — Search for information by using specific field criteria. 	2 weeks
Projects/ Assessments		Students will create notes for final presentations and practice oral delivery skills prior to final presentation. <ul style="list-style-type: none"> — Timed practices — Projects/presentations 	2 weeks

METHODS: A variety of instructional strategies will be utilized to accommodate all learning styles including, but not limited to:

Lesson Design & Delivery: Teachers will incorporate these components of lesson design during direct instruction and inquiry activities. The order of components is flexible, depending on the teacher’s vision for the individual lesson. For instance, the objective and purpose, while present in the teacher’s lesson plan, are not made known to the students at the beginning of an inquiry lesson.

<p>Essential Elements of Effective Instruction Model for Lesson Design Using Task Analysis</p>	<p>Anticipatory Set Objective Standard Reference Purpose Input Modeling Check for Understanding Guided Practice Closure Independent Practice</p>
---	--

Some components may occur once in a lesson, but others will recur many times. Checking for understanding occurs continually; input, modeling, guided practice and closure may occur several times. There may even be more than one anticipatory set when more than one content piece is introduced.

Active Participation: Teachers will incorporate the principles of active participation and specific strategies to ensure consistent, simultaneous involvement of the minds of all learners in the classroom. Teachers should include both covert and overt active participation strategies, incorporating cooperative learning structures and brain research. Some of the possible active participation strategies include:

Possible methods to implement overt active participation (Oral, Written and/or Gestures)			Active Participation	Possible lesson design component to incorporate the given active participation strategy		
O	W	G	Strategy Name & Description	Anticipatory Set	Check for Understanding	Closure
X			Think-Pair-Share: All students receive individual time to formulate an answer, pair up with a partner to discuss and then share out to class.	X	X	X
	X		Response Boards: Students type their responses on the computer and share with their neighbor	X	X	X
		X	Hand Signals: A private gesture with the hands. Most effective to teacher (as a check for understanding) when students keep gestures close to their chest so other students can not see their answer. Examples include: Thumbs up/down, open/closed fist, one-finger/two fingers, arms crossed/uncrossed.		X	
X			Whip Around, Pass Option: Teacher whips around the room until getting an oral answer/comment from each student. Students do have the option to pass the first time around.	X		X
	X		Reflection/Summary writing: Students use electronic journals to independently reflect on the learning.			X
	X		Attentive Lecture: In this strategy students are not allowed to take notes as the teacher is giving content information. Every 2-3 minutes, the teacher stops giving instruction and students are to write the crucial input given in the last few minutes in their notebooks.		X	
X		X	Group Alerting: After presenting material, teacher asks a question. Without calling on an individual, the teacher pauses to let the entire group formulate an answer. After pausing, the teacher calls on a particular student. When the student has finished answering, the teacher cues the whole class to respond to the individual's answer with a thumbs-up or thumbs-down gesture.		X	X

Literacy and Differentiation Strategies:

Learning styles and learning challenges of your students may be addressed by implementing combinations of the following:

<u>Reading Strategies in Technology</u>	<u>SDAIE Strategies for English Learners</u>	<u>Differentiation for Advanced Learners</u>
<ul style="list-style-type: none"> ▪ Learning Logs ▪ Pre-teaching ▪ Vocabulary ▪ Pre-reading ▪ Text Structures ▪ Trail Markers ▪ Reciprocal Teaching ▪ Functional Text ▪ Anticipation Guide 	<ul style="list-style-type: none"> ▪ Tapping/Building Prior Knowledge (Graphic Organizers, Schema) ▪ Grouping Strategies ▪ Multiple Intelligences ▪ Adapt the Text ▪ Interactive Learning (Tutorials, Simulations, Visuals) ▪ Acquisition Levels ▪ Language Sensitivity ▪ Lower the Affective Filter (including Processing Time) ▪ Home/School Connection (including Cultural Aspects) 	<ul style="list-style-type: none"> ▪ Curriculum Compacting ▪ Tiered Assignments ▪ Flexible Grouping ▪ Acceleration ▪ Depth and Complexity ▪ Independent Study

MATERIALS USED IN TEACHING THE COURSE: A variety of instructional tools will be used to meet the needs of all students –

- Macs or PCs
- Keyboarding software:
 - Typing Time
 - Century 21 Computer Keyboarding
- Word-processing applications
 - Microsoft Word
 - Internet Access
- Spreadsheet applications
 - Microsoft Excel
- Multi-media applications
 - PowerPoint
- Internet Access
 - Internet Explorer
 - Netscape Navigator
- Textbooks:
 - Computer Concepts
 - Integrated Computer Projects

STANDARD GRADING SCALE

A = 90% - 100%

B = 80% - 89%

C = 70% - 79%

D = 60% - 69%

F = Below 60%

EVALUATION: Student achievement in this course will be measured using multiple assessment tools including but not limited to:

- Timed practices
- Quizzes/tests
- Projects
- Portfolios
- Technology Performance Criteria

The standard grading scale is used to determine grades on quizzes and tests. The performance criteria determine the proficiency level of students in using and applying computer skills.

Submitted by: Vanitha Chandrasekhar

School/Office: Technology Office

Original Date:

Revised Date: 10-15-04