

GERALDTON COMPOSITE HIGH SCHOOL

2016-2017

ICS20 - Introduction to Computer Studies, Grade 10 – COURSE OUTLINE

Teacher: Mr. S. Wilson

February 2017 –June 2017

Hello,

I am your child's teacher for the Grade Ten Introduction to Computer Studies course and I wanted to make you aware of some classroom and school-wide policies. I have included some day-to-day housekeeping issues below so that you are aware of my expectations. Please take the time to go over this course outline with your son or daughter to ensure they understand the requirements outlined below.

The majority of work for this course will be completed in one of the school's computer labs. All resources will be provided and I will make every attempt to use software programs that are available free-of-charge to students so they can continue their learning at home. Students are expected to follow the GCHS Computer Code of Conduct or risk being having their account suspended, which would put success in this course in jeopardy. Please see me if there are questions or concerns.

I have designed ICS20 to be a hands-on, inquiry-based class. This means that while there are set units and expectations, much of the learning will be by trial-and-error, (sort of like an art class). Students have a due dates for assignments and will be provided with a reasonable amount of time to complete their work. If conflicts arise due to unforeseen circumstances it is expected that students or parents will communicate with the school as soon as possible. If a student is absent for any reason, I expect that the student will be responsible to find out what lessons and/or assignments were missed when they return. I am available most days during the lunchtime activity period to provide extra help and to provide a time to catch up on missed work.

The first Progress Report will be provided mid-March. At this time, I will indicate how your child's progress is in each of the four Achievement Categories by providing them with a level along with a report on Learning Skills. The Midterm Report Card will be sent home in mid-May, which will be comprised of a mark, along with another report on Learning Skills. Outside of these official reports, I do my best to provide very regular updates to students – especially if they fall behind.

I encourage parts/guardians to email me at swilson@sgdsb.on.ca so we can communicate quickly if necessary. I am also available by phone through the school at 854-0130. I also invite you to follow our class on my website, www.wilsonteacher.ca

Finally, you can receive automatic text-message updates about our class through the **Remind** tool. Text @wilsonICS to (705) 996-0817 to participate.

Thank you in advance for your cooperation.

Mr. S. Wilson.

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Curriculum Policy: The Ontario Curriculum: Computer Studies, 2008

Prerequisite: N/A **Credit Value:** 1.0

Rationale:

This course introduces students to computer programming. Students will plan and write simple computer programs by applying fundamental programming concepts, and learn to create clear and maintainable internal documentation. They will also learn to manage a computer by studying hardware configurations, software selection, operating system functions, networking, and safe computing practices. Students will also investigate the social impact of computer technologies, and develop an understanding of environmental and ethical issues related to the use of computers.

Overview of Course:

The following is a list of study areas in this course and the overall expectations that students should achieve by the end of this course.

- 1. Understanding Computers**
 - Hardware Components
 - Software Products
 - Operating Systems
 - Home Computer Networking
 - Maintenance & Security

- 2. Introduction to Programming**
 - Programming Concepts
 - Writing Programs
 - Code Maintenance

- 3. Computers & Society**
 - Social Impact
 - Environmental Stewardship & Sustainability
 - Ethical Issues
 - Postsecondary Opportunities

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EVALUATION:

ACHIEVEMENT CHART: COMPUTER STUDIES, GRADES 10–12

| Categories | 50–59% (Level 1) | 60–69% (Level 2) | 70–79% (Level 3) | 80–100% (Level 4) |
|---|--|---|---|---|
| Knowledge and Understanding – Subject-specific content acquired in each course (knowledge), and the comprehension of its meaning and significance (understanding) | | | | |
| | The student: | | | |
| Knowledge of content <i>(e.g., facts, technical terminology, definitions, procedures, standards)</i> | demonstrates limited knowledge of content | demonstrates some knowledge of content | demonstrates considerable knowledge of content | demonstrates thorough knowledge of content |
| Understanding of content <i>(e.g., concepts, principles, methodologies, use of tools)</i> | demonstrates limited understanding of content | demonstrates some understanding of content | demonstrates considerable understanding of content | demonstrates thorough understanding of content |
| Thinking – The use of critical and creative thinking skills and/or processes | | | | |
| | The student: | | | |
| Use of planning skills <i>(e.g., focusing research, gathering information, selecting strategies, organizing a project)</i> | uses planning skills with limited effectiveness | uses planning skills with some effectiveness | uses planning skills with considerable effectiveness | uses planning skills with a high degree of effectiveness |
| Use of processing skills <i>(e.g., analysing, interpreting, assessing, reasoning, evaluating, integrating, synthesizing)</i> | uses processing skills with limited effectiveness | uses processing skills with some effectiveness | uses processing skills with considerable effectiveness | uses processing skills with a high degree of effectiveness |
| Use of critical/creative thinking processes <i>(e.g., evaluation of computer solutions, problem solving, decision making, detecting and correcting flaws, research)</i> | uses critical/creative thinking processes with limited effectiveness | uses critical/creative thinking processes with some effectiveness | uses critical/creative thinking processes with considerable effectiveness | uses critical/creative thinking processes with a high degree of effectiveness |
| Communication – The conveying of meaning through various forms | | | | |
| | The student: | | | |
| Expression and organization of ideas and information <i>(e.g., clear expression, logical organization) in oral, visual, and written forms, including electronic forms (e.g., presentations, charts, graphs, tables, maps, models, web pages, reports)</i> | expresses and organizes ideas and information with limited effectiveness | expresses and organizes ideas and information with some effectiveness | expresses and organizes ideas and information with considerable effectiveness | expresses and organizes ideas and information with a high degree of effectiveness |

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| Categories | 50–59% (Level 1) | 60–69% (Level 2) | 70–79% (Level 3) | 80–100% (Level 4) |
|--|--|---|---|---|
| Communication <i>(continued)</i> | | | | |
| | The student: | | | |
| Communication for different audiences <i>(e.g., peers, computer users, company supervisor) and purposes (e.g., to inform, to persuade) in oral, visual, and written forms, including electronic forms</i> | communicates for different audiences and purposes with limited effectiveness | communicates for different audiences and purposes with some effectiveness | communicates for different audiences and purposes with considerable effectiveness | communicates for different audiences and purposes with a high degree of effectiveness |
| Use of conventions, vocabulary, and terminology of the discipline in oral, visual, and written forms, including electronic forms | uses conventions, vocabulary, and terminology of the discipline with limited effectiveness | uses conventions, vocabulary, and terminology of the discipline with some effectiveness | uses conventions, vocabulary, and terminology of the discipline with considerable effectiveness | uses conventions, vocabulary, and terminology of the discipline with a high degree of effectiveness |
| Application – The use of knowledge and skills to make connections within and between various contexts | | | | |
| | The student: | | | |
| Application of knowledge and skills <i>(e.g., concepts, procedures, processes, use of tools) in familiar contexts</i> | applies knowledge and skills in familiar contexts with limited effectiveness | applies knowledge and skills in familiar contexts with some effectiveness | applies knowledge and skills in familiar contexts with considerable effectiveness | applies knowledge and skills in familiar contexts with a high degree of effectiveness |
| Transfer of knowledge and skills <i>(e.g., choice of tools and software, ethical standards, concepts, procedures, technologies) to new contexts</i> | transfers knowledge and skills to new contexts with limited effectiveness | transfers knowledge and skills to new contexts with some effectiveness | transfers knowledge and skills to new contexts with considerable effectiveness | transfers knowledge and skills to new contexts with a high degree of effectiveness |
| Making connections within and between various contexts <i>(e.g., between computer studies and personal experiences, opportunities, social and global challenges and perspectives; between subjects and disciplines)</i> | makes connections within and between various contexts with limited effectiveness | makes connections within and between various contexts with some effectiveness | makes connections within and between various contexts with considerable effectiveness | makes connections within and between various contexts with a high degree of effectiveness |

Note: A student whose achievement is below 50% at the end of a course will not obtain a credit for the course.

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UNITS:

| Unit Number | Unit Title | Unit Length (Approx.) |
|--------------------|--------------------------------------|------------------------------|
| Unit 1 | Jumping In: Coding With Scratch | 3 weeks (20 hours) |
| Unit 2 | Computer Hardware & Software | 4 weeks (30 hours) |
| Unit 3 | Programming With Python | 4 weeks (30 hours) |
| Unit 4 | HTML, CSS, and Websites | 3 weeks (20 hours) |
| Unit 5 | Hands-On Computer Projects | 4 weeks (30 hours) |
| Unit 6 | Final Culminating Project: Your Game | 2 weeks (20 hours) |

***UNITS SUBJECT TO CHANGE IN CONTENT AND ORDER DEPENDING ON WHERE WE ARE AT.**

ASSESSMENT:

| Type of Assessment | Category | Details | Weighting (%) |
|---------------------------|-------------------|--|----------------------|
| Formative (70%) | Assignments | Each unit will have a variety of small assignments to assess for learning and skills development | 25 |
| | Projects | Larger assignments will be deemed projects and each unit will have 1-2 of these | 20 |
| | Culminating Tasks | A final task for each unit will allow students to show an understanding of skills and expectations | 20 |
| | Tests/Quizzes | Tests/Quizzes, In-class assignments; oral presentations | 15 |
| Summative (30%) | Final Assessment | Course Culminating Task | 20 |
| Total (%) | | | 100 |

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LEARNING SKILLS:

The Ontario Ministry of Education outlines learning skills that students are evaluated on throughout the year.

| Learning Skill | Sample Behaviour |
|-----------------------|--|
| Responsibility | The student: <ul style="list-style-type: none">• fulfils responsibilities and commitments within the learning environment;• completes and submits class work, homework, and assignments according to agreed-upon timelines;• takes responsibility for and manages own behaviour. |
| Organization | The student: <ul style="list-style-type: none">• devises and follows a plan and process for completing work and tasks;• establishes priorities and manages time to complete tasks and achieve goals;• identifies, gathers, evaluates, and uses information, technology, and resources to complete tasks. |
| Independent Work | The student: <ul style="list-style-type: none">• independently monitors, assesses, and revises plans to complete tasks and meet goals;• uses class time appropriately to complete tasks;• follows instructions with minimal supervision. |
| Collaboration | The student: <ul style="list-style-type: none">• accepts various roles and an equitable share of work in a group;• responds positively to the ideas, opinions, values, and traditions of others;• builds healthy peer-to-peer relationships through personal and media-assisted interactions;• works with others to resolve conflicts and build consensus to achieve group goals;• shares information, resources, and expertise and promotes critical thinking to solve problems and make decisions. |
| Initiative | The student: <ul style="list-style-type: none">• looks for and acts on new ideas and opportunities for learning;• demonstrates the capacity for innovation and a willingness to take risks;• demonstrates curiosity and interest in learning;• approaches new tasks with a positive attitude;• recognizes and advocates appropriately for the rights of self and others. |
| Self-Regulation | The student: <ul style="list-style-type: none">• sets own individual goals and monitors progress towards achieving them;• seeks clarification or assistance when needed;• assesses and reflects critically on own strengths, needs, and interests;• identifies learning opportunities, choices, and strategies to meet personal needs and achieve goals;• perseveres and makes an effort when responding to challenges. |

This evaluation will be in the form of a letter designation as follows:

E=Excellent G=Good S=Satisfactory N=Needs Improvement

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Specific Expectations:

- **Preparedness.** Students are also expected to be on time for class with all required, materials, ready for the day's work. Students may be responsible for making up time lost due to lateness in the form of detentions. Students who are habitually late will have classroom privileges revoked.
- **Absences.** A student returning to class after any absence is expected to have an admit slip issued by the attendance office prior to the start of class. Exceptions are given due to school-related events, no buses due to weather or absences authorized by an outslip.
- **Students who miss class are expected to get that day's assignment from another student or the teacher on their own.** If you know that you are going to be away, let me know in advance to avoid problems.
- **Late Assignments.** Students are given a fair and reasonable amount of time to complete assignments. Major assignments will be assigned a due date and a closure date, which occurs three days after the due date. This will be the final date that assignments may be submitted for assessment. If you find your schedule is busy or you need extra help see me sooner than later.
- **Plagiarism.** Familiarize yourself with the school's Plagiarism Policy. I do check student work on a regular basis and plagiarism will at the very least result in a zero on a plagiarized assignment *even if it is just one paragraph!*

I look forward to a productive and good term for all of us. If you have any questions at all during the semester regarding the course or your progress, please feel free to call me at the school at 854-0130 or make an appointment to see me.

You are encouraged to regularly visit the class website at www.wilsonteacher.ca for extra copies of assignments, useful links and contact information should you need assistance on course work outside of class time.

Sincerely,

Mr. S. Wilson