Ministry of Education
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The Honourable Sean Conway, Minister
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BUSINESS STUDIES

Intermediate and Senior Divisions 1987

Keyboarding

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Course Codes

The keyboarding program includes the following courses:

- Keyboarding I, Basic Level (BKI)
- Keyboarding II, Basic Level (BKA)
- Keyboarding III, Basic Level (BKW)
- Keyboarding I, General Level (BKI)
- Keyboarding II, General Level (BKA)
- Keyboarding III, General Level (BKW)
- Keyboarding I, Advanced Level (BKI)
- Keyboarding II, Advanced Level (BKA)
- Keyboarding III, Advanced Level (BKW)

BUSINESS STUDIES

Intermediate and
Senior Divisions
1987

Keyboarding

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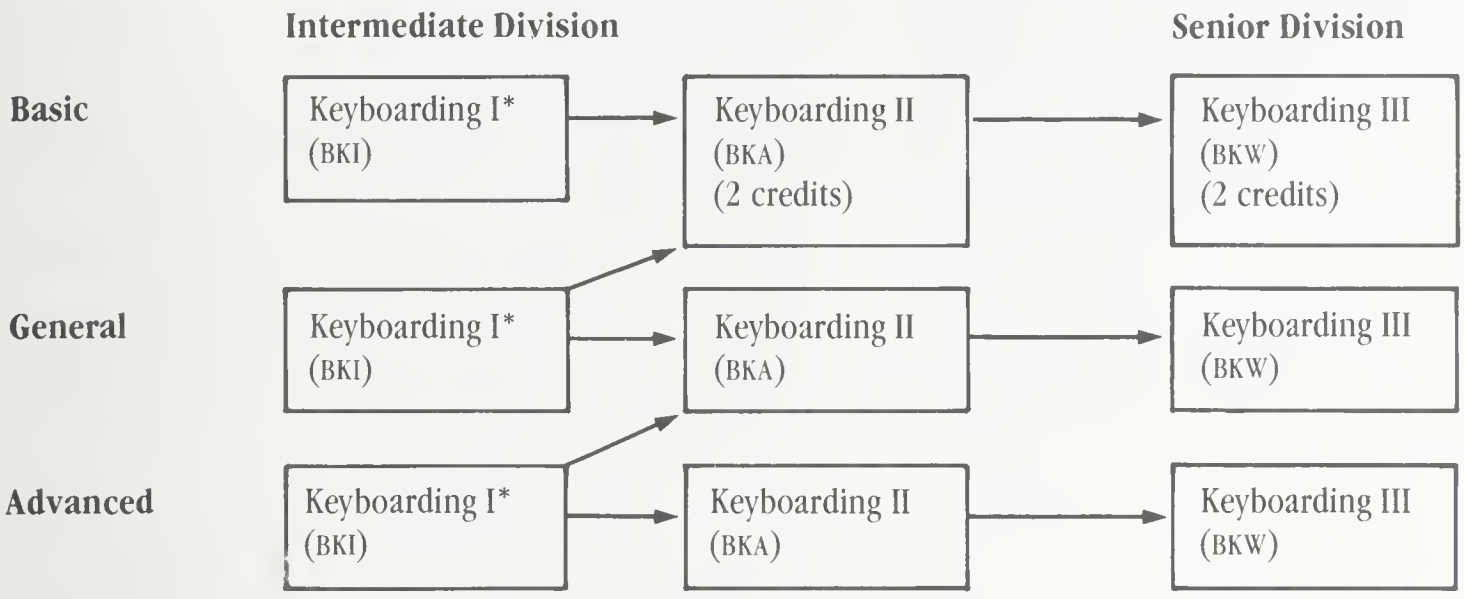
Introduction

Program Description

Over the next few years most students will use a computer keyboard at home, in school, or in business. Thus, a keyboarding program will serve a wide variety of student needs and interests. An introductory program will provide opportunities for students to develop a usable skill that they can apply in capturing and presenting information (both personal and business) and in easing their transition into an information-based society. Further keyboarding courses will focus on advanced keyboarding applications and production standards that meet job-entry requirements identified in business.

As illustrated in the diagram on page 5, this part of the business studies guideline authorizes nine courses in keyboarding. Students may earn a maximum of five in-school credits in keyboarding at the basic level or three in-school credits at the general or advanced level of difficulty. Additional credits in this program may be earned through a co-operative education mode of delivery as authorized in section 5.11 of OSIS.

The Keyboarding Program



* Keyboarding I may be offered to students in the Senior Division who were not able to take it in the Intermediate Division.

A school may wish to offer one or more modules from the keyboarding program as one-quarter or one-half credits, depending on the needs identified by the school community. Suggestions regarding four such modules are presented in table 1.

Table 1 Thirty-Hour Keyboarding Modules

Module	Guideline Section	Core Units
Acquisition of Touch Typing	Keyboarding I, General or Advanced Level	1,5
Proofreading and Editing Skill Development	Keyboarding I, General or Advanced Level	3
Applied Formatting for Output Information Processing	Keyboarding III, General or Advanced Level	3
Skill Building and Production Work	Keyboarding III, General or Advanced Level	1

Units of instruction designed to prepare students for keyboarding activities may be included in programs for grades prior to Grade 9. In designing such units, teachers shall refer to the Keyboarding I course at the general or advanced level and are encouraged to base their introductory unit on unit I, "Keyboarding Skill Development", in order to prepare students for a full keyboarding program or help them use a computer keyboard more effectively.

Aims

Students taking keyboarding courses should develop competence with the touch system on an alphabetic keyboard, the ability to use number and symbol keys, accurate proofreading and editing skills, an understanding of the keyboarding terms required for personal business applications and for systems and procedures used in the business community, and work habits that will make the effort put into any task productive. They should demonstrate progress in keyboarding speed and accuracy and the ability to transcribe thoughts, ideas, impressions, and reflections at the keyboard.

Individuals require a number of basic communication skills both for their business pursuits and for their personal lives. Thus, students should develop thinking, listening, speaking, reading, and writing skills at an appropriate level of difficulty. They should understand the need for standard forms of language and be able to apply the rules of punctuation, capitalization, number presentation, grammar, spelling, and word division to written communication. Finally, they should improve the quality of their finished written communication through the use of careful proofreading and editing procedures.

The aims of all keyboarding courses are to provide students with opportunities to:

- acquire a usable keyboarding skill applicable to their individual needs and to new office technologies;
- develop proficiency in language use and in the organization of thought for effective communication;
- develop businesslike skills and attitudes, which include working independently and assuming responsibility for the quality of their work;
- develop effective interpersonal skills that will facilitate a rewarding interaction with peers and others;
- develop an awareness of current and future career opportunities in the business community;
- explore the effect of computer technology on the workplace;
- develop those thinking and decision-making skills that are integral to effective keyboarding.

Teaching Strategies

In addition to the general teaching strategies included in the business studies policy document, *Policy for Program Planning and Delivery,* teaching strategies for keyboarding courses are included in this section and in the descriptions of specific keyboarding courses that follow. In general, teaching strategies in a keyboarding program should emphasize the following:

- the development of keying competency
- the acquisition of various technical skills and communication skills that are integral to keying
- the synthesis of keying skills with the ability to produce applications of an acceptable standard
- the development of appropriate work habits and attitudes

Classroom Organization and Management

Classroom routines should be established early and maintained throughout the course. Theory presentations should be brief so that students have ample opportunity to develop their keying skills. Students should be given immediate feedback and required to redo any of their poorly keyed or formatted assignments.

The development of effective work habits should be an integral component of classroom operation. Expectations with respect to student punctuality, the meeting of deadlines, co-operation with others in the classroom, and the proper use of equipment and supplies must be communicated to students early in the course.

Ideally, the room should be equipped with text-editing equipment and typewriters so that students will become familiar with various methods of formatting.

At the beginning of each course students should be given information on the following:

- the supplies required
- classroom routines and expectations regarding behaviour
- good work-station management, including the care of texts, equipment, and supplies
- room designations and times available for extra practice
- the nature and proportional weighting of the evaluation components of the course

Skill Development

The value of teacher demonstrations of each aspect of proper keying and formatting techniques is well known. Demonstrations to the whole class should be supplemented by demonstrations to small groups and individual students wherever necessary. Students should be given adequate opportunities to participate in regular keying drills that have been especially designed to develop speed or accuracy through practice. Technique, speed, accuracy, pyramid, and controlled-rate drills should be assigned on a frequent and regular basis.

It is important that students have an opportunity to apply their developing skill so that the purpose of their drill assignments is apparent to them.

Formatting Skills Development

Formatting skills development should be an integral part of every lesson. Students can be given formatted models of their keying assignment to introduce them to new formatting procedures. Formatting decisions can be made initially by the teacher, then by the class with teacher assistance, and finally by students on their own.

Although this guideline states the letter style to be taught, teachers are encouraged to substitute the standard letter style used in their business community. In Keyboarding II or III at the advanced level, students should be exposed to the simplified letter style that is commonly used with electronic mail.

Communication Skills Development

Students should be encouraged to use the keyboard to originate their communication and to become familiar with composing, responding to questions, or rewording instructions on the keyboard. Competency in the correct use of punctuation, grammar, spelling, word division, and capitalization can be achieved through composing, editing, revising, and proofreading at the keyboard.

Proofreading instructions and practice should be given regularly, and students should be required to proofread all of their work, individually or in pairs, in order to detect and correct formatting, keying, content, and language errors.

Students should be able to apply their proofreading skills to both hard copy and screen text, using such methods as comparing their work with a model, proofreading with a partner, checking against reference materials, and checking numbers and names character by character. They should ultimately realize that both time and cost effectiveness are reduced when documents are returned for the correction of careless errors.

Employment Skills and Career Opportunities

Speakers (e.g., former graduates, school secretaries, or businesspeople from the local community), slides, films, newspaper or magazine articles, visits to local business establishments, and keying assignments related to careers can all be used to heighten students' awareness of career opportunities and to serve as a basis for a discussion of career direction and the further education required for specific careers. Established business attitudes, standards, and work habits should be clearly conveyed to students and integrated into the course.

Notebooks/Keying Manuals

The keeping of a notebook, manual, or folder encourages students to be both organized and prepared for work. A folder may be sufficient in introductory keyboarding courses. Students should be instructed to keep specific format samples and other helpful materials in a neat and orderly manner. In later keyboarding courses they should be required to set up a manual with notes on procedures, theory presentations, standard format set-ups, and specific samples of their work.

Review and Preparation for Tests and Examinations

Since the emphasis in evaluation should be on materials that have been practised and perfected, further review before a test should not be required.

Evaluation of Student Achievement

General suggestions for the evaluation of student achievement are found in the business studies policy document, *Policy for Program Planning and Delivery*. The following recommendations relate to all keyboarding courses. Additional suggestions for assessment are included in the "Teaching and Assessment Strategies" section for each keyboarding course.

An overall weighting procedure for evaluation should be designed and communicated to students at the beginning of the course.

Performance tests should be administered after students have mastered a particular keying or formatting application. Practice assignments based on new objectives should not be assigned marks. As students are mastering new objectives, their progress can be evaluated by observation; this evaluation can be communicated by written comments and student-teacher discussion. Students should be expected to plan, format, key, and proofread an assignment within a reasonable time frame.

Self-evaluation is an important component of this program. Students should be taught to evaluate their own performances using such techniques as comparing their work against a model, following instructions for formatting, and maintaining their own speed and accuracy progress charts.

Speed and Accuracy – Timed Writings

Non-correcting equipment. Although both speed and accuracy are important components of an effective keyboarding skill-development course, they should be *developed and evaluated separately*.

As soon as students have demonstrated a reasonable command of the alphabetic keyboard, a part of each keyboarding lesson should be devoted to speed and accuracy drills. Drills should be teacher-directed, with students encouraged to maintain a simple record of the progress of their speed and accuracy control as they work towards the attainment of their individualized keying speed and accuracy goals.

Students should be given adequate opportunities to key materials at various levels of syllabic intensity (the average number of syllables per word in a given text). However, timed writings used for evaluation purposes should follow the recommended syllabic-intensity guidelines outlined in the "Speed and Accuracy Development" unit for each keyboarding course in this guideline.

An overall mark out of ten shall be assigned for speed (gross words per minute) and a separate overall mark out of ten for accuracy on timed-writing work. To determine a student's speed mark, the best three timed-writing gross-word-per-minute counts per term should be averaged. Table 2 contains a suggested marking scale.

The accuracy mark should be based on an average of the best three accuracy marks per term. In order to qualify for an accuracy mark, a student should be required to key for the full five-minute timing; alternatively, teachers can set a minimum number of words to be keyed before an accuracy mark will be awarded.

Table 2 Gross-Speed Evaluation Chart for Non-Correcting Equipment

The *minimum* gross-word-per-minute counts established for each keyboarding course are as follows:

Level of Difficulty	Keyboarding I	Keyboarding II	Keyboarding III
Basic	20 w.p.m.	30 w.p.m.	40 w.p.m.
General	30 w.p.m.	40 w.p.m.	50 w.p.m.
Advanced	30 w.p.m.	40 w.p.m.	50 w.p.m.

The following table may be used as a guide to converting keying-speed scores into marks out of ten. (If the school year is divided into three terms, the term I gross-word-per-minute objective should be lowered by five words.)

Keyboarding I (Basic)*	**Keyboarding I (General and Advanced)* and Keyboarding II (Basic)**		**Keyboarding II (General and Advanced) and Keyboarding III (Basic)**		**Keyboarding III (General and Advanced)**		**Mark out of 10**
Term II	**Term I**	**Term II**	**Term I**	**Term II**	**Term I**	**Term II**	
40	45	50	55	60	65	70	10
35	40	45	50	55	60	65	9
30	35	40	45	50	55	60	8
27	30	35	40	45	50	55	7
24	27	32	37	42	47	52	6
20	25	30	35	40	45	50	5
18	22	27	32	37	42	47	4
15	20	25	30	35	40	45	3
13	17	22	27	32	37	42	2
10	15	20	25	30	35	40	1

* Formal speed evaluation should occur in term II only.

Students should proofread their work carefully, noting each word with an uncorrected keying error. Table 3 may be used as a guide to converting the number of uncorrected words on a timed writing to a mark for accuracy. The table is established for five-minute timed writings.

Table 3 Accuracy Marking

No. of Errors	Accuracy Mark
0	10
1	9
2	8
3	7
4	6
5	5
6	4
7	3
8	2
9	1
10	0

Self-correcting equipment. As text-editing equipment eventually becomes commonplace in keyboarding classrooms, adjustments will have to be made to the way in which timed writings are evaluated. Students keying at self-correcting equipment should be encouraged to correct their errors as they key their timed-writing materials. As students are *combining* their speed and accuracy skills, twenty marks should be assigned for *net speed*, with ten words being deducted for every uncorrected error. Table 4 contains a suggested marking scale.

Table 4 Net-Speed Evaluation Chart for Self-Correcting Equipment

The *minimum* net-word-per-minute counts established for each keyboarding course are as follows:

Level of Difficulty	Keyboarding I	Keyboarding II	Keyboarding III
Basic	20 w.p.m.	30 w.p.m.	40 w.p.m.
General	30 w.p.m.	40 w.p.m.	50 w.p.m.
Advanced	30 w.p.m.	40 w.p.m.	50 w.p.m.

The following table may be used as a guide to converting keying-speed scores into marks out of twenty. (If the school year is divided into three terms, the term I net-word-per-minute objective below should be reduced by five words.)

Keyboarding I (Basic)*	Keyboarding I (General and Advanced)* and Keyboarding II (Basic)		Keyboarding II (General and Advanced) and Keyboarding III (Basic)		Keyboarding III (General and Advanced)		Mark out of 20
Term II	Term I	Term II	Term I	Term II	Term I	Term II	
40	45	50	55	60	65	70	20
35	40	45	50	55	60	65	18
30	35	40	45	50	55	60	16
27	30	35	40	45	50	55	14
24	27	32	37	42	47	52	12
20	25	30	35	40	45	50	10
18	22	27	32	37	42	47	8
15	20	25	30	35	40	45	6
13	17	22	27	32	37	42	4
10	15	20	25	30	35	40	2

* Formal speed evaluation should occur in term II only.

Keyboarding I, Basic Level (BKI)

Introduction

This Intermediate Division course will provide students with an important personal communication skill and a solid foundation for further studies in Keyboarding II and III. Students can earn one credit in this course, for which there is no prerequisite.

Students should be provided with opportunities to:

- develop a touch system for the alphabetic keyboard;
- master correct keying techniques;
- develop a facility with the number and symbol keys;
- develop speed and accuracy on the alphabetic keyboard;
- manipulate the operative parts of the keying equipment;
- develop their communication skills;
- develop the ability to format and key text from printed, typeset, typewritten, and hand-printed materials to acceptable standards;
- proofread for technical correctness;
- develop work habits that will be useful in their future educational experiences and acceptable to the business community;
- identify job positions and personal applications that require keying skills.

Teaching and Assessment Strategies

The teaching and assessment strategies described here relate specifically to this course. Additional, more general strategies are included in the introduction to the keyboarding program and in the business studies policy document *Policy for Program Planning and Delivery*.

Initial teaching strategies should be directed towards helping students acquire and apply correct keying techniques. Students should learn correct posture, fingering, and use of equipment components, as well as the technique of keying with their eyes on the copy rather than on the keyboard; these are more important in the early stages of learning how to key than is a great degree of accuracy. The demonstration of keying procedures by the teacher is an important strategy in an introductory program. Students should be encouraged to model correct keying posture, hand position, key-stroking techniques, and equipment manipulation as demonstrated by the teacher.

The "eyes on copy" habit can be encouraged through the regular and consistent use of speed drills. These speed drills are best managed through the assignment of straight-copy exercises that are to be completed within a specific time period. These exercises should consist of short, one-line sentences in the early part of the course and simple paragraphs later on. Each speed-drill exercise should have an assigned time limit and should be repeated with the addition of one word (for one-line exercises) or one line (for simple paragraph exercises) each time. No additional time should be allowed for the completion of exercises with additional words or lines. Forcing students to key familiar practice material more quickly by stretching their speed one word or one line at a time will help them develop and maintain the "eyes on copy" habit.

An emphasis on accurate keying should follow initial concentration on correct keying techniques. Students should be encouraged to continue to practise these techniques while directing their attention towards increasing their output, speed, and accuracy, as well as understanding and applying the principles involved in simple formatting activities.

Each keying lesson should be carefully planned to provide students with opportunities to drill and practise on review materials; to acquire and apply the skills necessary to add new keys, techniques, and formatting principles to their list of keying abilities; and to concentrate on developing greater facility with both speed and accuracy. Lessons should provide a frequent change of pace, opportunities for reinforcement, short but purposeful drills, self-competition for improved accuracy or speed, and opportunities to key from verbal cues.

All keying applications should be introduced through correctly keyed and formatted models. Clearly displayed keying instructions should be included, and students should be required to key a copy of the model, carefully following each instruction given. Eventually, using a step-by-step process, they should be able both to understand the formatting principles involved and to key copy for unarranged materials, making their own formatting decisions.

After the initial emphasis on the development of keying technique, consistent and controlled practice in speed, accuracy, formatting, and technique should be an important component of each keying lesson. Straight copy practice and keying-speed, accuracy, and technique drills, along with application assignments, should be emphasized on a regular basis.

In addition to regular assignments of copy keying and formatting, students should have opportunities to develop communication-related skills at the keyboard. They should be encouraged to create, revise, format, proofread, edit, and correct their communications at a keyboard. Regular proofreading exercises should be a part of all daily work assignments.

Students should be encouraged to participate in a keying club. They can prepare keyed materials for their personal use or for members of the school or business community. Where such a service is not practical, club members could concentrate on improving their keying speed and accuracy and participate in local keying competitions.

Students should also be encouraged to prepare and maintain an up-to-date notebook or manual that would include statements about technique and formatting principles, step-by-step procedures for particular applications, and correctly keyed and formatted examples of all course assignments. Students should be required to organize and set up this manual so that it will be a useful and accurate reference for their in-school and out-of-school keying requirements.

Marks should be assigned only for technique during the early stages of this course. During the rest of the course, technique should continue to be marked but with decreasing emphasis. In the second term warm-ups, assignments, and tests should constitute the major part of student evaluation; minimal emphasis should be placed on subjective grading throughout the course, but students' grades should clearly reflect their progress in the development of keying skill.

Accuracy should not be marked until students have had an opportunity to complete the introductory lessons on the alphabetic and numeric keyboard and have had sufficient time for review and practice.

Warm-ups, administered daily for a minimum of five minutes, can be marked for accuracy and/or completion (for a maximum of 10 per cent of the total mark). Daily assignments can be collected at regular intervals once students have achieved competency in the skills or theory presented in each unit. When evaluating, teachers should bear a variety of objectives in mind. For example, they can evaluate for format, accuracy, appearance, proofreading, and/or the completeness of each assignment. Overall the evaluation of the assignments given in this course should reflect an appropriate balance of emphasis on format, accuracy, appearance, and completeness of work. It is suggested that, by the end of the course, the following breakdown of marks be used for exercises that require keying, formatting, proofreading, and correcting of errors: out of a possible ten marks, six marks should be allotted for accurately keyed, proofread, and corrected copy and four marks for the correct application of formatting principles.

Speed and accuracy should be developed through regular drill and timed-writing practice. This practice should begin shortly after students have mastered the alphabetic keyboard. Timed-writing materials used for evaluation purposes should be of a syllabic intensity of 1.2. Students should start with one-minute practice sessions and progress to three- and ultimately five-minute timings. While informal timed-writing practice can begin immediately after students have completed the introduction to the alphabetic keyboard, formal evaluation of this part of the course shall occur only within the last quarter of the course and shall be based on the best three five-minute timings. In order for students to achieve the timed-writing objective of this course, approximately eleven hours of overall course time should be allotted for skill development and timed-writing practice.

Tests should consist of a variety of the following: true-and-false, fill-in-the-blank, multiple-choice, short-answer, and keyed exercises. They should be administered immediately on completion of a unit and should follow sufficient student practice activities and evidence that the objectives of the unit to be covered in the test have been mastered adequately. Students should be encouraged to grade some of their own work as well as the work of other students in the class so that they improve their ability to assess their own keying skills.

Notebooks should be evaluated at least once and perhaps as many as four times during the course, with emphasis placed on completeness, organization, and neatness. The marking of assignments, tests, and timed writings should be done on a regular basis, with assignments returned promptly to provide students with immediate feedback and reinforcement.

The following table outlines the core units of content for the course and the percentage of class time and relative emphasis for assessment purposes that should be allocated to each unit of content. Note that the sequencing of units is left to the discretion of the teacher. The percentages suggested here allow for the inclusion of optional material of local interest within each unit or as an additional unit.

Suggested Time and Evaluation Framework

Unit	Per Cent of Course
I. Keyboarding Skill Development	30–40
II. Employment Skills and Career Opportunities	10–20
III. Formatting and Communication Skills	40–50
IV. Speed and Accuracy Development	10–20

Course Content

The main items of course content for each unit are presented in bold-face type. Each of these is followed by more specific learning opportunities that relate to the main item of content. Note that all of the items outlined in bold face are core content.

I. Keyboarding Skill Development

Touch typing is defined as "keeping one's eyes on the material being copied while operating alphabetic, number, punctuation, and control keys, using correct fingering and operating function keys with proper control". Correct keying technique is introduced early in the first topic and weighted heavily in the evaluation of the topic. The teacher should continue to stress technique throughout the remainder of the course, but decrease its emphasis to 10–15 per cent in the last term.

Core Content

Students will:

1. **be aware of and demonstrate correct keying techniques throughout the course;**
   - apply correct keyboard posture (keeping the body erect; feet flat on the floor; fingers curved; wrists low, relaxed, and off the equipment; forearms parallel to the keyboard; body a handspan from the machine; and eyes on the copy) and fingering (placing curved fingers over the home keys; striking each key with a sharp, quick movement; stroking downwards towards the palm of the hand; releasing the key quickly and returning the finger to the home key);
   - use efficiently the operative parts of the equipment;

2. **develop competence in keying using the touch-typing system;**

   - practise on the alphabetic keyboard, paying particular attention to the punctuation marks;

3. **understand the importance of ergonomics in the development of keying skills and techniques;**

   - identify the features of the equipment that they are using and the techniques for using this equipment to avoid unnecessary stress or fatigue;
   - arrange their work stations and chairs at a proper height, position their materials effectively on the work surface in order to maintain proper lighting of the work area, and manage their time and effort efficiently;

4. **develop facility with the keying of numbers and symbols, including the use of a numeric key pad where available;**

   - practise on the non-alphabetic keyboard, paying particular attention to number and commonly used symbol keys;
   - understand the importance of accurately keyed numbers (e.g., postal codes, social-insurance numbers, telephone numbers);

5. **develop the ability to use the manipulative parts and functions of the keying equipment;**

   - manipulate the parts of the keying equipment in the most efficient manner and practise applying its function abilities.

II. Employment Skills and Career Opportunities

Core Content
Students will:

1. **demonstrate the personal and interpersonal skills required for success in a keying environment;**

   - discuss and display appropriate attitudes and human-relations skills;

2. **demonstrate effective work habits on a regular and consistent basis (e.g., arrive for class punctually and with all necessary materials, begin work quietly and immediately, report equipment damage or breakdown immediately, handle texts carefully, leave the desks and floor area clean at the end of class);**

   - incorporate effective thinking, listening, reading, writing, and speaking skills into assignments;

3. **identify various job positions and personal communications that require keying skills;**

   - identify job positions and personal keying applications after listening to speakers, viewing films, taking individual or group field trips, and reading current literature;

4. **identify further keyboarding courses that are appropriate to both their needs and their career aspirations;**

   - explore course calendars.

III. Formatting and Communication Skills

Core Content
Students will:

1. **using the equipment efficiently, format a variety of printed text materials on both typewriters and text-editing equipment;**
   - practise centring materials (e.g., invitations, announcements, notes, short reports, poems, songs, and cover pages) both vertically and horizontally, using appropriate display techniques (e.g., block centring, spread centring, variable spacing, block capitals);
2. **key and understand the function of personal letters and personal business letters with matching envelopes;**
   - key one letter style (full block and open punctuation) with the following letter parts included: return address, date line, inside address, salutation, body, closing, typed signature;
3. **key text material in paragraph form, making correct line-ending decisions;**
   - practise and apply word-division rules on all keyed material;
4. **key sentences, inserting correct punctuation, grammar, and spelling;**
   - use correct spacing before and after punctuation marks;
   - practise intensively the correct use of the following punctuation marks: semicolon, period, comma, question mark, colon;
   - apply punctuation, grammar, and spelling rules, using dictionaries and other reference materials as resources;
5. **proofread their work for keying and formatting errors;**
   - continually practise their proofreading skills by reading for keying, grammatical, punctuation, and spelling errors;
6. **review and compose word and phrase responses to the teacher's questions or prompts;**
   - format and key their responses, read them aloud, and listen to and assess other student responses, paying attention to correct language usage;
7. **make corrections to their keyed copy, employing techniques that are appropriate to the equipment being used.**

Optional Content
Students will:

1. *using the equipment efficiently, format a variety of handwritten materials on text-editing equipment as well as typewriters;*
2. *using the equipment efficiently, format a variety of printed text materials into simple tabulated form with no column headings on both typewriters and text-editing equipment.*

IV. Speed and Accuracy Development

Students using non-correcting keying equipment who achieve the end-of-course minimum objective of twenty *gross* words per minute shall earn 50 per cent of the total marks allotted for speed (five marks out of a maximum of ten marks). See table 2 on page 10 of this document for a suggested speed-evaluation marking scale.

Students who achieve the end-of-course minimum objective of five errors per five minutes of keying shall earn 50 per cent of the total marks allotted for accuracy (five out of a maximum of ten marks). (See table 3 on page 11 of this document.) This requirement may be modified for those students for whom this is not a realistic expectation.

If students are working on self-correcting equipment, speed and accuracy shall be evaluated together as *net words* per minute. See table 4 on page 11 of this document for a suggested marking scale.

Core Content
Students will:

1. **by the end of the course, develop their keying abilities to meet a minimum objective of twenty gross words per minute on the average word count of their best three five-minute timed writings using non-correcting equipment or twenty net words per minute on the average word count of their best three five-minute timed writings using self-correcting equipment. Timed-writing materials used for evaluation purposes shall have a syllabic intensity of 1.2;**
2. **by the end of the course, develop their accuracy control to meet a minimum objective of no more than one error per minute of keying;**
   - establish progressive personal goals for speed and accuracy as they strive to meet guideline requirements;
   - appreciate the importance of frequent practice and the need for accuracy control.

Keyboarding II, Basic Level (BKA)

Introduction

This course, which may be offered in either the Intermediate or the Senior Division, will help students acquire a job-oriented keying skill. The emphasis will be placed on the development of speed, accuracy, and formatting and proofreading skills, as well as on an understanding of the procedures related to basic office communications. Students can earn two credits in this course. Keyboarding I, Basic or General Level is a prerequisite for this course.

Students should be provided with opportunities to:

- master the alphabetic keyboard;
- develop competence with the number and symbol keys;
- apply their keying skill to the preparation, from printed text, of a variety of simple business documents;
- expand their formatting, proofreading, and editing skills so that their written communication skills improve;
- develop the decision-making and manipulative skills required for efficient formatting and for working independently with a minimum amount of direction;
- demonstrate work habits and attitudes that are conducive to success in the business community.

Teaching and Assessment Strategies

The teaching and assessment strategies described here relate specifically to this course. Additional, more general strategies are included in the introduction to the keyboarding program and in the business studies policy document, *Policy for Program Planning and Delivery*.

The emphasis in this course should be placed on helping students to acquire a job-oriented keying skill. The teaching strategies, therefore, must concentrate on the development of students' speed and accuracy, the expansion of their communication and technical skills, and the development of their ability to plan and execute tasks independently. Student assignments should be patterned after simple, straightforward keying tasks performed in the world of work. Expectations with respect to quality and quantity of work and to work habits should reflect those of the business world.

The development of increased speed and accuracy can be achieved through activities such as regular short and intensive practice sessions, speed drills, and timed writings. Since the building of student self-confidence is important, timed writings for this course should be taken from straight-copy material and should not exceed a syllabic intensity of 1.2 for evaluation purposes.

Timed writings should be a regular part of the classroom routine. The speed and error rates outlined earlier in this guideline are the performance goals for the end of the course. The criteria during the beginning and middle stages of the course must necessarily be different from these final goals and should be structured so that almost every student can submit a timed writing on a regular basis. As their straight-copy speed develops, students should begin to feel a keen sense of achievement.

Short production tests requiring students to produce error-free work from printed and formatted material are to be administered on a periodic basis. Care must be taken with such tests, since too much emphasis on this type of activity can create unnecessary stress and may result in poor performance. At this point in the program, production tests should be viewed mainly as a tool to heighten student awareness of the expectations in the business world with respect to rapid and accurate production of keyed material.

Each production test should be preceded by a review of the appropriate format theory, warm-up drills (keyed at a production rate of speed with errors being corrected), and practice with production exercises.

Production tests should progress throughout the course from two-minute to five-minute to ten-minute timings. In the beginning stages, students should be given an extra five minutes to proofread, correct, and submit their work. Later on, keying, proofreading, and correcting should all be done within the time allotted for the assignment. In the marking of production tests, the total number of keyed words is divided by the length, in minutes, of the timing, with words deducted for each uncorrected error. The scale used to assign marks for production work should be determined at the board level. It should reflect a slightly lower expectation than that for straight-copy timed-writing achievements, but it should also recognize the importance of establishing a realistic goal for production performance.

Each new formatting concept should be introduced individually so that students can master one particular concept before moving on to the next. While the procedure outlined here is for letters, the same step-by-step process should be used to develop the planning and formatting skills for other types of documents.

After a presentation by the teacher that illustrates the purpose and placement of attention lines, students should produce letters with attention lines from a printed model where the format has been clearly indicated. Students should then produce letters with attention lines from printed material that is not totally arranged. The degree to which the material is unarranged will vary with each class. Each new display line should be introduced in a similar fashion. A previously learned display line can be incorporated into the new task occasionally to reinforce student learning until, finally, students can be expected to produce letters of various types – some with no display lines, some with one, and some with several. The letters used should be short, since their purpose is only to provide students with the opportunity to master the placement for various display lines.

In the teaching of business forms, it is sometimes helpful to group the forms that students will key according to the manipulation skills involved.

To acquire a viable skill, students need to have opportunities to establish clear and attractive formats based on their own judgement. In preparing master copies for duplicating, students have an excellent opportunity to use their creative and artistic abilities while refining their technical skills. Pictures, logos, or other design work can also be incorporated into their work. Depending on the equipment available, students may need to be taught that time can be saved by cutting and pasting to make additions, deletions, corrections, and even to resequence material. Manuscripts can be introduced through the use of a manuscript frame that outlines the starting line, margins, and so on. In fact, many topics lend themselves to this type of introduction. However, this strategy should be used only occasionally, since it does little to develop in students the ability to plan.

Handouts on theory and prepared models should be distributed to students, and they should be required to refer to them when completing their assignments.

Communication skills can be further developed by having students key abbreviations or plurals from a list of words, key lists of short words from longer words, explain a procedure or operation to another student, or key answers to short oral quizzes. Students should be required to interpret written instructions, make notes from oral instructions, and use appropriate business terminology in their creative-writing activities.

In addition to detecting keying or formatting errors, students should be expected to make complex proofreading decisions. They should be required to ask themselves such questions as the following: Does the material make sense? Has it been attractively arranged? Is this word spelled correctly? They should also be taught specific proofreading "tips", for example, that numbers should be checked twice and that a person's name should be checked carefully letter by letter. Dictionaries and word-division books should be available for reference purposes.

Student assignments must necessarily be completed on an individual basis. Since every exercise should focus not only on the keying of the exercise but also on the development of the planning and formatting skills involved, each exercise within an assignment should be short so that student learning is reinforced by the need to plan and format frequently. The successful completion of one short exercise will motivate students to attempt another.

As student competency develops, exercises within assignments should be varied to meet a wider range of student needs and abilities. Possible variations include exercises that focus on previously learned theory, exercises for which no instructions from the teacher are provided, and handwritten exercises.

Intensive practice for a considerable period of time is necessary if skill in performing a particular task is to be attained. If possible, in the latter stages of the course students should have opportunities to complete a range of tasks within a class period so that they can apply a variety of concepts. Considerable emphasis should be placed on keying from and formatting handwritten and rough-draft material.

The development of effective work habits should be an integral component of the classroom operation. Expectations with regard to punctuality, the meeting of deadlines, co-operation, and so on should be clearly conveyed to students, and these behaviours should be consistently encouraged.

Student notebooks can help students to develop their organizational skills. Students should be instructed on how to structure their notebooks and on what materials to keep in them. They should also be encouraged to refer to their notebooks when they have to solve keying or formatting problems.

Performance tests should be administered after students have mastered a particular objective. The purpose of these tests should be to evaluate student abilities to plan and format a task within a reasonable period of time. Such tests should be short; the instructions and the assigned task should reflect situations that students have become accustomed to in class. Students should always know in advance when a test will be given.

Short theory tests of various types may be given occasionally but should be assigned only a small percentage of the mark allotted for tests, since the emphasis must be on students' ability to produce accurately keyed and formatted material.

Projects incorporating various topics may be assigned. They provide an excellent opportunity for students to undertake various activities with little teacher direction. They should be reasonably short, and the mark for them should be incorporated into the percentage allotted for class assignments.

Student notebooks may be assessed for neatness, completeness, and overall organization.

It is strongly recommended that students' performance on assignments towards the end of the course weigh more heavily than their performance at the beginning of the course.

Self-evaluation is an important component of this program, and students should be taught to evaluate their own work using such techniques as comparing their work to a model solution, checking their tab and margin settings against those supplied by the teacher or other students, maintaining their own individual speed charts to record their progress, and visually checking their placement results.

The following table outlines the core units of content for the course and the percentage of class time and relative emphasis for assessment purposes that should be allocated to each unit of content. Note that the sequencing of units is left to the discretion of the teacher. The percentages suggested here allow for the inclusion of optional material of local interest within each unit or as an additional unit. Where this course is taught as a single-credit course, the evaluation percentages should remain the same.

Suggested Time and Evaluation Framework

Unit	Per Cent of Course
I. Keyboarding Skill Development – Speed, Accuracy, Production	20–30
II. Formatting and Communication Skills Development	50–70
III. Work Attitudes and Career Expectations	10–20

Course Content

The main items of course content for each unit are presented in bold-face type. Each of these is followed by more specific learning opportunities that relate to the main item of content. Note that all of the items outlined in bold face are core content.

I. Keyboarding Skill Development – Speed, Accuracy, Production

Students using non-correcting keying equipment who achieve the end-of-course minimum objective of thirty gross words per minute shall earn 50 per cent of the total marks allotted for speed (five marks out of a maximum of ten marks). See table 2 on page 10 of this document for a suggested speed-evaluation marking scale.

Students who achieve the end-of-course minimum objective of five errors per five minutes of keying shall earn 50 per cent of the total marks allotted for accuracy (five out of a maximum of ten marks). (See table 3 on page 11 of this document.) This requirement may be modified for those students for whom this is not a realistic expectation.

If students are working on self-correcting equipment, speed and accuracy shall be evaluated together as net words per minute. See table 4 on page 11 of this document for a suggested marking scale.

Production should be evaluated only in term II. See the "Teaching and Assessment Strategies" section of this course for suggested methods of development and evaluation.

Core Content
Students will:

1. **by the end of the course, have developed their keying speed to meet a minimum expectation of thirty gross words per minute on the average word count of their best three five-minute timed writings on non-correcting equipment, or thirty words per minute on the average word count of their best three five-minute timed writings on self-correcting equipment. The materials used for timed writings shall be at a minimum syllabic intensity of 1.2;**
2. **by the end of the course, have developed their accuracy control to meet a minimum objective of no more than one error per minute of keying;**
3. **produce error-free or error-corrected business communications in the form of simple letters, memoranda, and brief reports in order to meet a *minimum passing* production standard of twenty production words per minute on five-minute timings. The materials used for timings should be straight-copy work from already formatted and accurately typed material.**

II. Formatting and Communication Skills

Core Content
Students will:

1. **be introduced to a decision-making process to aid them in formatting and keying a variety of simple business documents from printed text;**
   - practise making correct line-ending, proofreading, and error-correcting decisions;
   - use effective alignment;
   - using various display techniques and paper sizes, centre the following: tabular work with block-column headings; short and medium-length business letters (only one business letter style should be taught – full or semiblock with either open or two-point punctuation); commonly used display lines (subject, attention, company name in closing, operator's initials); form letters and business forms; interoffice memoranda (one- and two-page manuscripts with side headings); and simple financial statements;
   - practise applying word-division rules;
   - understand the routines used in the processing of completed documents (filing the copy, folding for mailing, distributing copies);
   - practise processing routines through simple simulation exercises or case-study situations;

2. **develop listening and composition skills at the keyboard;**

   - listen to questions, format and key their responses and the responses of others, and read the responses aloud;
   - understand the rules for capitalization and practise keying sentences inserting correct capitals;
   - understand the rules for number representation and key short paragraphs, making correct number-representation decisions;
   - key text material, both in sentence and paragraph format, to practise their spelling, grammar, and punctuation.

Optional Content
Students will format and key business documents from handwritten or rough-draft material.

III. Work Attitudes and Career Expectations

Core Content
Students will:

– **acquire and demonstrate consistently appropriate work habits, modelling their attitudes and interpersonal skills to meet work situations;**

   - discuss job and educational opportunities in which keying skills are included among the requirements;
   - identify subsequent courses that include a keying component;
   - practise social skills, including those related to dress, deportment, and showing respect for and getting along with others;
   - apply their acquired keying skills to produce keyed material that meets the quantity and quality expectations established by the business community.

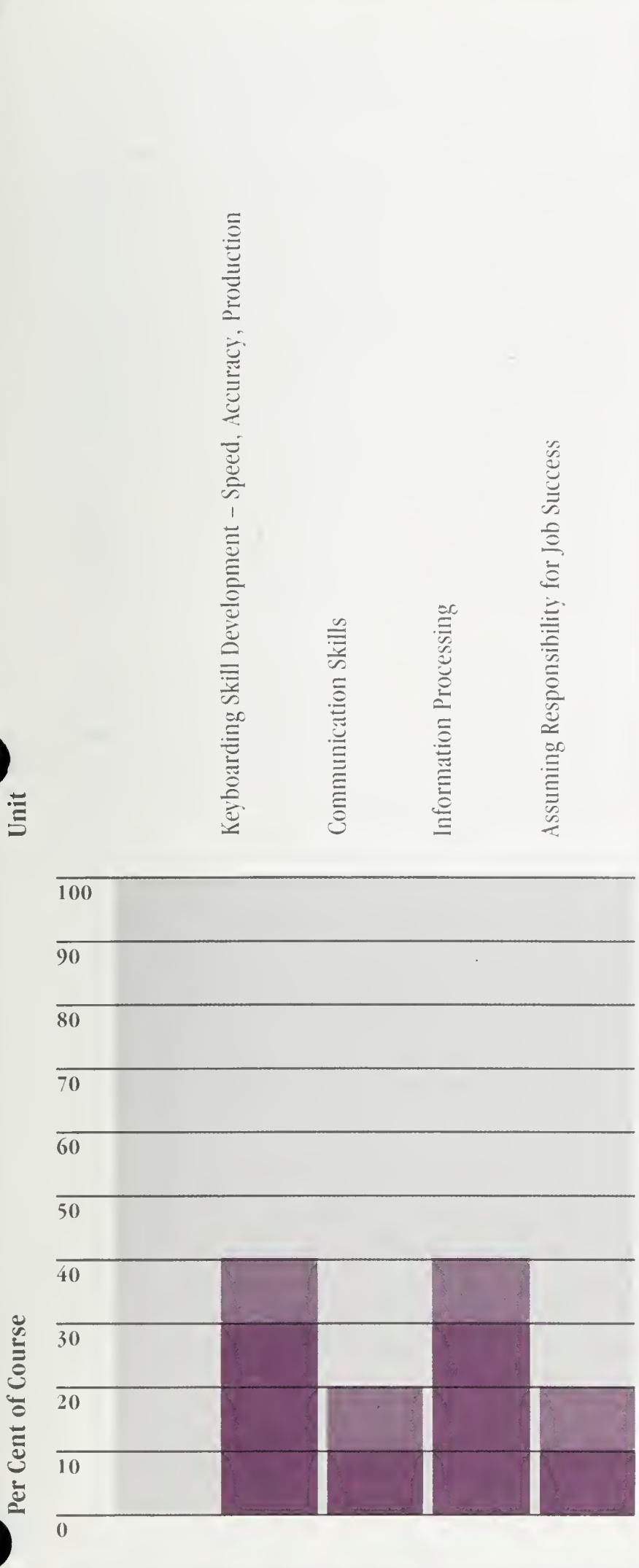
Keyboarding III, Basic Level (BKW)

Introduction

This course will help Senior Division students to refine their keying and communication skills through the use of a variety of business office equipment. Students will use decision-making skills to key, proofread, edit, and produce business communications of mailable quality. Students can earn two credits in this course. Keyboarding II, Basic or General Level is a prerequisite for this course.

Students should be provided with opportunities to:

- develop mastery at the keyboard;
- use a wide range of information-processing equipment efficiently;
- consolidate and extend their skills and knowledge to produce business communications of acceptable quality;
- develop the ability to work both independently and co-operatively;
- acquire work habits and attitudes that are acceptable to the business community;
- explore career paths and become aware of some of the applications of the skills developed in this program.



Teaching and Assessment Strategies

The teaching and assessment strategies described here relate specifically to this course. Additional, more general strategies are included in the introduction to the keyboarding program and in the business studies policy document, *Policy for Program Planning and Delivery*.

The focus of this course is on the development of a marketable keying skill. It is critical to the delivery of this course that the equipment required to support the core content be available for student use.

Teaching strategies should concentrate on the expansion and refinement of student skills and knowledge so that students will develop the ability to perform various routine office activities efficiently, quickly, and independently.

Speed and accuracy development and timed-writing practice should be a regular part of the class routine. The speed and accuracy rates outlined earlier in this guideline are suggested performance goals for the end of the course. The criteria during the beginning and middle stages of the course must necessarily be different from these final goals and should be structured so that every student can submit a timed writing on a regular basis. Students should maintain personal speed-record charts and establish personal speed goals for the various segments of the course.

The development of speed and accuracy can be achieved through the regular scheduling of short practice sessions, speed drills, and timed writings. Short production tests requiring students to produce error-free work from print, cursive writing, and formatted and unformatted material should be administered as well.

It is suggested that each school board may wish to originate a common marking scale for production word count, similar to the speed-evaluation charts (tables 2 and 4) on pages 10 and 11 of this document, with a specific number of production words to be deducted for each uncorrected error. Care should be taken to ensure that the marking scale established for production work reflects a slightly lower expectation than that established for straight-copy timed writing, while still supporting realistic goals for students in this course.

In any task the mastery of formatting mechanics is the first step in the development of efficient production work. In order for them to achieve mastery, students should be provided with tasks designed to focus on the formatting essentials. For example, for the initial development of speed in the preparation of memoranda, the actual body of the memoranda can consist of just one or two lines. The teacher can make use of the chalkboard, an overhead projector, or prepared models to introduce the memorandum format to be used. Initially students can be required to produce exact copies of memoranda that are already arranged. As soon as they master the basic format procedures involved, they can be required to correct errors and produce finished work from unarranged memoranda without teacher guidance.

Students should receive immediate feedback on the completion of each assignment. In this way, serious learning problems can be overcome, and student efforts can be rewarded by encouragement and support.

While each activity can be timed, the purpose of such timings should be solely to encourage students to work quickly; they should not be used as a basis for calculating production speed or grades. This approach builds students' speed on formatting mechanics, quickly pinpoints areas where individual students are experiencing difficulty, and, if used to review previous theory, makes such reviews both challenging and enjoyable.

Each production-building session of this type should be followed by a short realistic assignment. The follow-up activity in this case would be for students to key from several examples of handwritten or rough-draft copy within a reasonable period of time. Once students have mastered the format, they can concentrate their efforts on the communication skills involved in the task.

The production of mailable correspondence requires a knowledge of such matters as spelling, grammar, punctuation, and capitalization, and the ability to proofread. Students require constant opportunities to develop these skills through specific language and proofreading practice, as well as through the integration of these types of activities into their assignments.

All *transcription* material should be general in nature, rather than specialized, since specialized material also entails the development of specialized vocabulary. Before using transcribing equipment, students should key from direct dictation. They can begin by transcribing words and phrases and then progress to sentences and paragraphs.

Initially students should be given some background information regarding the contents of the correspondence assigned in order to ensure that their transcription is realistic. Spelling, punctuation, and paragraphing that might cause students particular difficulty should be previewed. Students should be encouraged to listen to the complete letter before transcribing so that they are better able to produce an accurate copy on their first attempt. After transcribing dictated material, students should present it to the teacher, who can then make corrections to content, insert proofreaders' marks, and return it so that a final copy can be made.

Students should be evaluated on the efficient use of equipment, as well as on the final copy produced. The final copy can be evaluated on the basis of *quality, transcription words per minute, or a combination of the two.* It is suggested that school boards originate a marking scheme for transcription that reflects the expectations of businesses in the community.

The focus in the initial use of text-editing equipment should be on paragraphs, until students can use the equipment efficiently in performing basic operations such as formatting, storing and recalling, editing, and printing on their own. Students can then concentrate on realistic tasks of varying complexity. With the help of a well-designed operating manual, students will be able to progress through a series of such tasks fairly independently.

These can consist of class assignments, in which every student in the classroom performs the same series of tasks, or individual assignments, in which each student undertakes a completely different series of tasks. In the latter part of the course, students should undertake completely individualized assignments that closely reflect "real-life" business applications.

All assignments should simulate business-office work and should include unarranged handwritten or rough-draft materials. Specific time lines should be established. Instructions should be kept to a minimum so that students are encouraged to develop both judgement and initiative.

Students must be expected to determine the best display technique for the task at hand, follow implied instructions, insert missing information, check their spelling, proofread, and so on. In short, students should learn to assume complete responsibility for producing a final product that meets standards that are acceptable in a business environment.

While initial assignments will probably focus on a particular topic (e.g.. letters), assignments should ultimately encompass a range of tasks and equipment. In addition to keying assignments, students should regularly complete assignments that are specifically designed to improve their language and proofreading skills.

Group projects can be undertaken occasionally. For example, groups could be responsible for bulletin-board displays on a rotating basis. Such displays could involve a variety of topics: a sketch of the basic components of a word processor, appropriately labelled with a glossary of word-processing terminology; a display of job advertisements requiring a keying skill, with unfamiliar words highlighted and defined; a summary of a procedure (e.g., a merging operation with samples of the finished products). Such projects provide both a change of pace and an opportunity for students to demonstrate a wide range of creative, organization, and interpersonal skills.

The classroom should be organized to simulate an actual office situation with respect to both activities and expectations. Students must be given every opportunity to work under the conditions that they are likely to encounter on the job. These include the following:

- producing to meet specific deadlines
- using letterhead
- working effectively both independently and with others
- preparing actual enclosures
- following and giving oral instructions
- setting priorities, managing time, analysing problems, making decisions, working under pressure, and coping with interruptions
- discussing problems with peers
- using various reference sources

If equipment is limited, a rotation plan should be established to ensure that all students operate all of the equipment available. Students should be expected to assist other students in the operating procedures of the equipment they have used.

The theory of this course can be presented in two ways: it can be interspersed over the duration of the course or it can be concentrated in the first half of the course, with the second half focusing mainly on the applications of theory. The latter approach more easily lends itself to organizing the classroom to simulate an actual office. Regardless of the approach used, all theory presentations must involve an applications component. Students should have opportunities to apply immediately what they have been taught and to receive feedback.

Student awareness of technology and the general work environment can be broadened through field trips, films, demonstrations by equipment companies, newspaper and magazine articles, and case studies. In addition, many students have valuable knowledge related to various aspects of the course as a result of part-time jobs, work-experience weeks, and so on. These students should have opportunities to share their experiences in classroom discussions.

Since most student evaluation in this course should involve short performance tests that are administered soon after students have mastered a particular topic, very little review is required. If given, examinations should be of the performance type. A project focusing on examination topics will serve as an excellent review.

Students should be provided with a breakdown of the specific areas to be assessed and the percentage of marks apportioned to each area. Students should also have a clear understanding of the weighting policy for the entire course.

A variety of assessment instruments can be used. Drill work, proofreading exercises, and exercises on specific communications skills can all be marked for accuracy.

Although students need to experience the pressure of producing work within a strict time limit, little skill development takes place under test conditions. Therefore, while testing is necessary, it should constitute only a small percentage of class time and hence a small percentage of students' grades. All tests, regardless of type, should reflect the situations that students have become accustomed to in class.

Marking schemes in this course should be flexible. Students may produce documents that are correct and usable but that would have been more effective if the format had been slightly different. They should not be penalized for their decisions, but suggestions for format improvement should be made. When marking for mailability, the teacher should make a clear distinction between major errors that make a document unusable and minor ones that can be corrected.

The grading system for group projects will vary with their purpose and content. However, some factors that can be considered are creativity, organization, neatness, accuracy, and co-operation.

Student notebooks may be assessed for completeness, neatness, and organization.

Since the ability to evaluate one's own work is essential, students should be given opportunities to assess all facets of their work. They should be provided with marking schemes that include a listing of deductions for various types of errors.

The following table outlines the core units of content for the course and the percentage of class time and relative emphasis for assessment purposes that should be allocated to each unit of content. Note that the sequencing of units is left to the discretion of the teacher. The percentages suggested here allow for the inclusion of optional material of local interest within each unit or as an additional unit. These percentages remain the same if this course is taught as a single-credit course.

Suggested Time and Evaluation Framework

Unit	Per Cent of Course
I. Keyboarding Skill Development – Speed, Accuracy, Production	30–40
II. Communication Skills	10–20
III. Information Processing	30–40
IV. Assuming Responsibility for Job Success	10–20

Course Content

The main items of course content for each unit are presented in bold-face type. Each of these is followed by more specific learning opportunities that relate to the main item of content. Note that all of the items outlined in bold face are core content.

I. Keyboarding Skill Development – Speed, Accuracy, Production

If students are working on self-correcting equipment, speed and accuracy are evaluated together as *net words* per minute. (See the subsection "Speed and Accuracy – Timed Writings" on pages 9 to 11 of this document.)

Students using non-correcting keying equipment who achieve the end-of-course minimum objective of forty gross words per minute shall earn 50 per cent of the total marks allotted for speed (five marks out of a maximum of ten marks). (See table 2 on page 10 of this document for a suggested speed-evaluation marking scale.)

Students who achieve the end-of-course minimum objective of five errors per five minutes of keying shall earn 50 per cent of the total marks allotted for accuracy (five out of a maximum of ten marks). (See table 3 on page 11 of this document.) This requirement may be modified for those students for whom this is not a realistic expectation.

If students are working on self-correcting equipment, speed and accuracy shall be evaluated together as net words per minute. See table 4 on page 11 of this document for a suggested marking scale.

Core Content
Students will:

1. **by the end of the course, have developed their keying speed to meet a minimum expectation of forty gross words per minute on the average word count of their best three five-minute timed writings using non-correcting equipment, or forty net words per minute on the average word count of their best three five-minute timed writings using self-correcting equipment. The materials used for evaluation purposes shall have a syllabic intensity of 1.4;**
2. **by the end of the course, have developed their accuracy control to meet a minimum objective of no more than one error per minute of keying;**
3. **produce error-free or error-corrected business letters, memoranda, and simple reports in order to meet a *minimum passing* production standard according to a scale established at the local board level on five-minute timings. The materials used for production testing should not include unformatted work or work with revision marks. (See the "Teaching and Assessment Strategies" section above for additional suggestions on production development and evaluation.)**

II. Communication Skills

This unit could include a work-experience placement.

Core Content
Students will:

1. **continue to develop their language skills: grammar, punctuation, spelling, and the composition of simple sentences and paragraphs;**
   - engage in extensive practice in word division, number usage, and spacing before and after symbols;
   - improve their language skills by checking reference materials to help them make decisions on grammar, punctuation, and spelling;
   - proofread all keyed material for language errors and for content;
2. **produce business communication from rough drafts and handwritten text on typewriters and text-editing equipment;**
   - key realistic, simulated business communications, such as letters, memoranda, reports, financial statements, and tables;
3. **read and interpret instructions given on regular assignments or found in procedures manuals;**
4. **extend their communication skills by following both oral and written instructions;**
   - make appropriate notes to help them follow directions on assignments;
   - give clear directions to the members of their working groups.

III. Information Processing

See the "Teaching and Assessment Strategies" section above for suggestions on transcription development and evaluation.

Core Content
Students will:

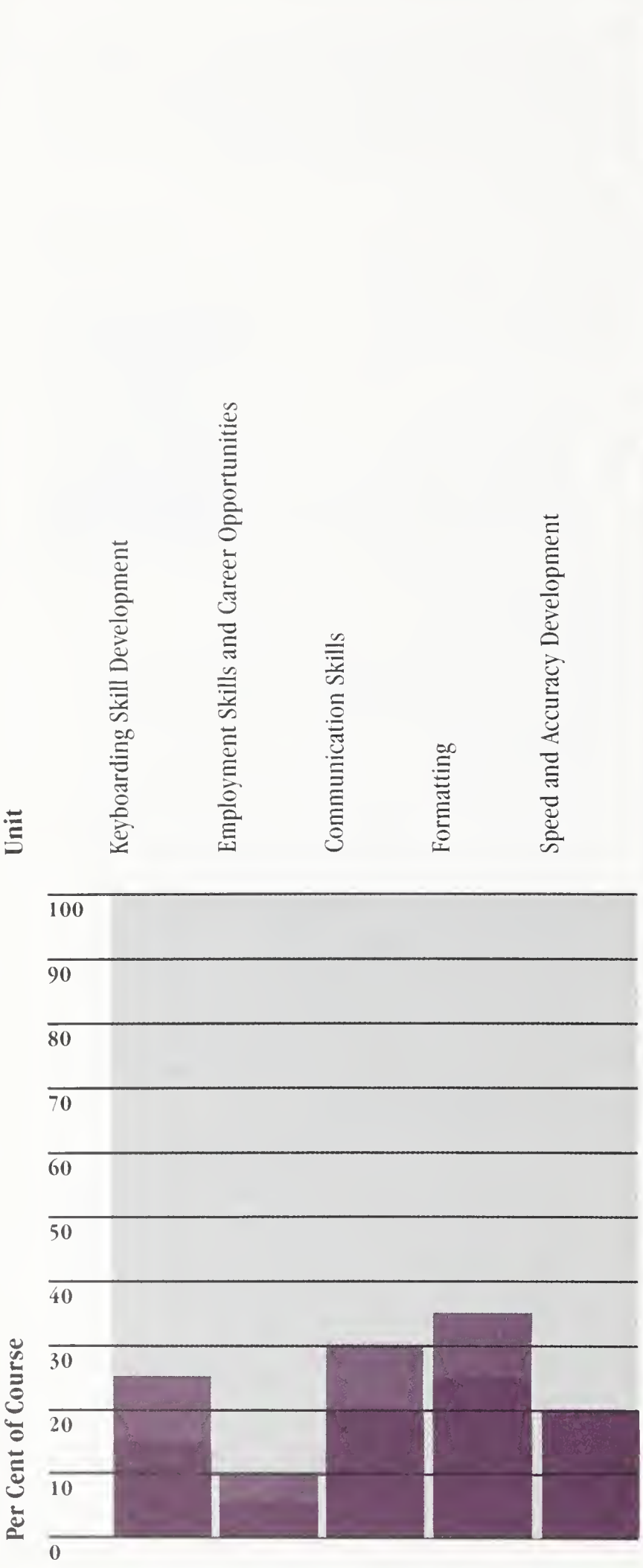
1. **produce mailable business communications using text-editing and text-formatting software;**
   - practise handling equipment efficiently to produce business letters, memoranda, and reports;
2. **understand the purpose of and operate a transcribing machine for the production of communications that meet business expectations;**
   - organize an efficient work station to prepare for transcription;
   - develop good listening techniques;
   - develop a continuous keying pattern while transcribing;
   - apply their language skills;
   - use transcription equipment efficiently, responding to many kinds of voices and adjusting modulation controls to achieve the clearest possible tone.

IV. Assuming Responsibility for Job Success

Core Content
Students will:

1. **be encouraged to think through each assignment to ensure its full, detailed, and accurate completion;**
   - determine an appropriate plan for the completion of assignments and work according to their plan;
   - use their organizing, decision-making, keying, proofreading and editing, communication, and evaluation skills to complete all assignments;
   - recognize acceptable performance standards and assume personal responsibility for the evaluation of their work against these standards;
   - demonstrate the work habits, attitudes, and interpersonal skills that they will require for success in the business community;
   - apply their acquired skills to simulated office assignments, meeting business expectations in relation to the following: format, number of copies, circulation of copies, the use of the most efficient equipment, the handling of stress caused by interruptions or equipment breakdown while trying to meet deadlines, mailability.
2. **format and key a letter of application and a résumé.**

Keyboarding I, General Level (BKI)



Introduction

Keying is a communication-related skill. This Intermediate Division course will provide students with important personal and job-related skills for use in a computer-oriented society. Students can earn one credit in this course, for which there is no prerequisite.

Students should be provided with opportunities to:

- master correct keying techniques;
- develop a touch system at an automatic level for the alphabetic and numeric keyboard;
- develop speed on alphabetic keys;
- develop a facility with symbol keys;
- skilfully manipulate the operative parts of their keying equipment;
- develop good communication skills, including effective reading, writing, listening, and thinking skills and the ability to express their ideas orally and in writing at the keyboard;
- develop proofreading, editing, and formatting skills to facilitate the production of quality work on the keyboard;
- develop work habits that will be acceptable to the business community and prove useful in their future educational experiences;
- develop an awareness of career paths related to keyboard-entry employment opportunities and identify personal applications that require keying skills.

Teaching and Assessment Strategies

The teaching and assessment strategies described here relate specifically to this course. Additional, more general strategies are included in the introduction to the keyboarding program and in the business studies policy document, *Policy for Program Planning and Delivery.*

Initial teaching strategies should be directed towards helping students acquire and apply correct keying techniques. Students should learn correct posture, fingering, and use of equipment components, as well as the technique of keying with eyes on the copy rather than on the keyboard; these are more important in the early stages of learning how to key than is a great degree of accuracy.

The demonstration of keying procedures by the teacher is an important strategy in an introductory program. Students should be encouraged to model correct keying posture, hand position, key-stroking techniques, and equipment manipulation as demonstrated by the teacher.

The "eyes on copy" habit can be encouraged through the regular and consistent use of speed drills. These speed drills are best managed through the assignment of straight-copy exercises that are to be completed within a specific time period. These exercises should consist of short, one-line sentences in the early part of the course and simple paragraphs later on. Each speed-drill exercise should have an assigned time limit and should be repeated with the addition of one word (for one-line exercises) or one line (for simple paragraph exercises) each time. No additional time should be allowed for the completion of exercises with additional words or lines. Forcing students to key familiar practice material more quickly by stretching their speed one word or one line at a time will help them to develop and maintain the "eyes on copy" habit.

An emphasis on accurate keying should follow initial concentration on correct keying techniques. Students should be encouraged to continue to practise these techniques while directing their attention towards increasing their output, speed, and accuracy, as well as understanding and applying the principles involved in a variety of formatting activities.

Each keying lesson should be carefully planned to provide students with opportunities to drill and practise on review materials; to acquire and apply the skills necessary to add new keys, techniques, and formatting principles to their list of keying abilities; and to concentrate on developing greater facility with both speed and accuracy. Lessons should provide a frequent change of pace, opportunities for reinforcement, short but purposeful drills, self-competition for improved accuracy or speed, and opportunities to key from verbal cues.

All keying applications should be introduced through correctly keyed and formatted models. Clearly displayed keying instructions should be included, and students should be required to key a copy of the model, carefully following each instruction given. Eventually, using a step-by-step process, they should be able both to understand the formatting principles involved and to key copy from unarranged materials, making their own formatting decisions.

After the initial emphasis on the development of keying technique, consistent and controlled practice in speed, accuracy, formatting, and technique should be an important component of each keying lesson. Straight-copy practice and keying-speed, accuracy, and technique drills, along with application assignments, should be emphasized on a regular basis.

In addition to regular assignments of copy keying and formatting, students should have opportunities to develop communication-related skills at the keyboard. They should be encouraged to create, revise, format, proofread, edit, and correct their communications at a keyboard. Regular proofreading exercises should be a part of all daily work assignments.

Students should be encouraged to participate in a keying club. They can prepare keyed materials for their personal use or for members of the school or business community. Where such a service is not practical, club members could concentrate on improving their keying speed and accuracy and participate in local keying competitions.

Students should also be encouraged to prepare and maintain an up-to-date notebook or manual that would include statements about technique and formatting principles, step-by-step procedures for particular applications, and correctly keyed and formatted examples of all course assignments. Students should be required to organize and set up this manual so that it will be a useful and accurate reference for their in-school and out-of-school keying requirements.

Marks should be assigned only for technique during the early stages of this course. During the rest of the course technique should continue to be marked, but with decreasing emphasis. In the second term warm-ups, assignments, and tests should constitute the major part of student evaluation; minimal emphasis should be placed on subjective grading throughout the course, but students' grades should clearly reflect their progress in the development of keying skill.

Accuracy should not be marked until students have had an opportunity to complete the introductory lessons on the alphabetic and numeric keyboard and have had sufficient time for review and practice.

Warm-ups, administered daily for a minimum of five minutes, can be marked for accuracy and/or completion (for a maximum of 10 per cent of the total mark). Daily assignments can be collected at regular intervals once students have achieved competency in the skills or theory presented in each unit. When assessing, teachers should bear a variety of objectives in mind. For example, they can assess format, accuracy, appearance, proofreading, and/or the completeness of each assignment. Overall the assessment of assignments given in this course should reflect an appropriate balance of emphasis on format, accuracy, appearance, and completeness of work. It is suggested that, by the end of the course, the following breakdown of marks be used for exercises that require keying, formatting, proofreading, and correcting of errors: out of a possible ten marks, six marks should be allotted for accurately keyed, proofread, and corrected copy and four marks for the correct application of formatting principles.

Speed and accuracy should be developed through regular drill and timed-writing practice. This practice should begin shortly after students have mastered the alphabetic keyboard. Timed-writing materials used for evaluation purposes should be of a syllabic intensity of 1.2. Students should start with one-minute practice sessions and progress to three- and ultimately five-minute timings. While informal timed-writing practice can begin immediately after students have completed the introduction to the alphabetic keyboard, formal assessment of this part of the course shall occur within the last quarter of the course and shall be based on the best three five-minute timings. In order for students to achieve the timed-writing objective of this course, approximately twenty hours of overall course time should be allotted for skill development and timed-writing practice.

Tests should consist of a variety of the following: true-and-false, fill-in-the-blank, multiple-choice, short-answer, and keyed exercises. They should be administered immediately on completion of a unit and should follow sufficient student practice activities and evidence that the objectives of the unit to be covered in the test have been mastered adequately. Students should be encouraged to grade some of their own work as well as the work of other students in the class so that they become better able to assess their own keying abilities. Notebooks should be evaluated at least once and perhaps as many as four times during the course, with emphasis placed on completeness, organization, and neatness. The marking of assignments, tests, and timed writings should be done on a regular basis, with assignments returned promptly to provide students with immediate feedback and reinforcement.

The following table outlines the core units of content for the course and the percentage of class time and relative emphasis for assessment purposes that should be allocated to each unit of content. Note that the sequencing of units is left to the discretion of the teacher. The percentages suggested here allow for the inclusion of optional material of local interest within each unit or as an additional unit.

Suggested Time and Evaluation Framework

Unit	Per Cent of Course
I. Keyboarding Skill Development	15–25
II. Employment Skills and Career Opportunities	5–10
III. Communication Skills	20–30
IV. Formatting	25–35
V. Speed and Accuracy Development	20

Course Content

The main items of course content for each unit are presented in bold-face type. Each of these is followed by more specific learning opportunities that relate to the main item of content. Note that all of the items outlined in bold face are core content.

I. Keyboarding Skill Development

Touch typing is defined as "keeping one's eyes on the material being copied while operating alphabetic, number, and punctuation keys, using correct fingering and operating function keys with proper control". Correct keyboarding technique should be introduced early in this unit and should account for 50–60 per cent of the marks allotted to the unit. Technique should also be stressed throughout the remaining units but should be assigned less emphasis in terms of evaluation so that it accounts for only about 10–15 per cent of the marks allotted to the fourth unit.

Core Content
Students will:

1. **develop mastery of the alphabetic and numeric keyboard using the touch system;**
   - understand the importance of accurately keyed letters and numbers (e.g., postal codes, social-insurance numbers, telephone numbers);
   - practise on a number keypad;
   - intensively practise using punctuation marks and common symbols;

2. **be aware of and demonstrate correct keying techniques throughout the course;**

   - practise correct fingering (placing curved fingers over the home keys; striking each key with a sharp, quick movement; stroking downwards towards the palm of the hand; releasing the key quickly and returning the finger immediately to the home key);
   - practise correct posture (body erect, feet flat on the floor, fingers curved, wrists low and relaxed, forearms parallel to the keyboard, body a hand-span from the machine, eyes on copy);
   - demonstrate the correct use of equipment and its component parts, especially cursor control and function keys where word-processing equipment is available;

3. **understand the importance of ergonomics in the development of keying skills and techniques;**

   - identify the features of the equipment that they are using and the techniques for avoiding unnecessary stress or fatigue while using the equipment;
   - arrange their work stations and chairs at a proper height, position their materials on the work surface in order to manage their time and the work space efficiently, and properly light their work area.

II. Employment Skills and Career Opportunities

Core Content
Students will:

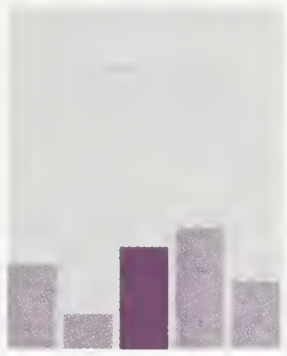
1. **demonstrate the personal and interpersonal skills that are essential to career success in a keying environment;**

   - discuss and display throughout the course appropriate attitudes, performance standards, and human-relation skills;
   - incorporate effective thinking, listening, reading, writing, and speaking skills into all assignments;
   - demonstrate effective work habits on a regular and consistent basis (e.g., arrive in class on time and with all necessary materials, begin work quietly and immediately, listen attentively to instructions, report any equipment damage or breakdown immediately, handle texts carefully, leave the desk and floor area clean at the end of class);

2. **identify and explore various careers and personal communications that require keying skills;**

   - identify job positions and personal keying applications after listening to speakers, viewing films, taking individual or group field trips, and reading current literature;
   - practise communication skills by formatting and keying a short report on a keying-related job position.

III. Communication Skills



Core Content
Students will:

– make effective use of equipment to key information from their own predrafted compositions and produce text to acceptable standards;

- compose their thoughts and ideas at the keyboard, progressing from phrases, sentences, and paragraphs to personal letters, lists, notes, and study guides produced from notes taken in other courses;
- correctly use punctuation, grammar, spelling, capitalization, and number representation;
- edit output initially to make it technically correct and eventually to revise it so that their ideas are presented clearly, concisely, and accurately.

IV. Formatting

Core Content
Students will:

1. make effective use of all of the special features of text-editing equipment and typewriters in keying text and handwritten material so as to produce work that meets acceptable standards;

- centre materials (e.g., memos, invitations, announcements, poems, and tabulations with main headings and simple column headings) both vertically and horizontally, using the appropriate display techniques (e.g., block centring, spread centring, variable spacing, and block capitals);
- key from models of one- or two-page manuscripts containing footnotes or endnotes and bibliographies;

2. **key and understand the purpose of personal, personal business, and business communications;**

   - key one letter style (full block and open punctuation) with the following parts: date line, inside address, salutation, body, closing, signer's identification, reference initials;
   - key appropriate envelopes;
   - understand and practise, through a simple simulation exercise, the various procedures related to a business letter (e.g., distributing photocopies, filing a copy, folding letters for mailing).

Optional Content

Students will key and understand the function of a letter of application and a data sheet. If time allows, additional letter styles may be introduced (e.g., semiblock and closed punctuation; block and mixed punctuation).

V. Speed and Accuracy Development

Students using non-correcting keying equipment who achieve the end-of-course minimum objective of thirty gross words per minute shall earn 50 per cent of the total marks allotted for speed (five marks out of a maximum of ten marks). (See table 2 on page 10 of this document for a suggested speed-evaluation marking scale.)

Students who achieve the end-of-course minimum objective of five errors per five minutes of keying shall earn 50 per cent of the total marks allotted for accuracy (five out of a maximum of ten marks). (See table 3 on page 11 of this document.) This requirement may be modified for those students for whom this is not a realistic expectation.

If students are working on self-correcting equipment, speed and accuracy shall be evaluated together as net words per minute. (See table 4 on page 11 of this document for a suggested marking scale.)

Core Content
Students will:

1. **by the end of the course, develop their keying speed to meet a minimum objective of thirty gross words per minute on the average word count of the best three five-minute timed writings using non-correcting equipment, or thirty net words per minute on the average word count of their best three five-minute timed writings using self-correcting equipment. Timed-writing materials used for evaluation purposes shall have a syllabic intensity of 1.2;**
2. **by the end of the course, develop their accuracy control to meet a minimum objective of no more than one error per minute of keying;**
   - establish progressive personal goals for speed and accuracy as they strive to meet guideline requirements;
   - appreciate the importance of frequent and regular practice and the need for accuracy control;
   - log their personal progress.

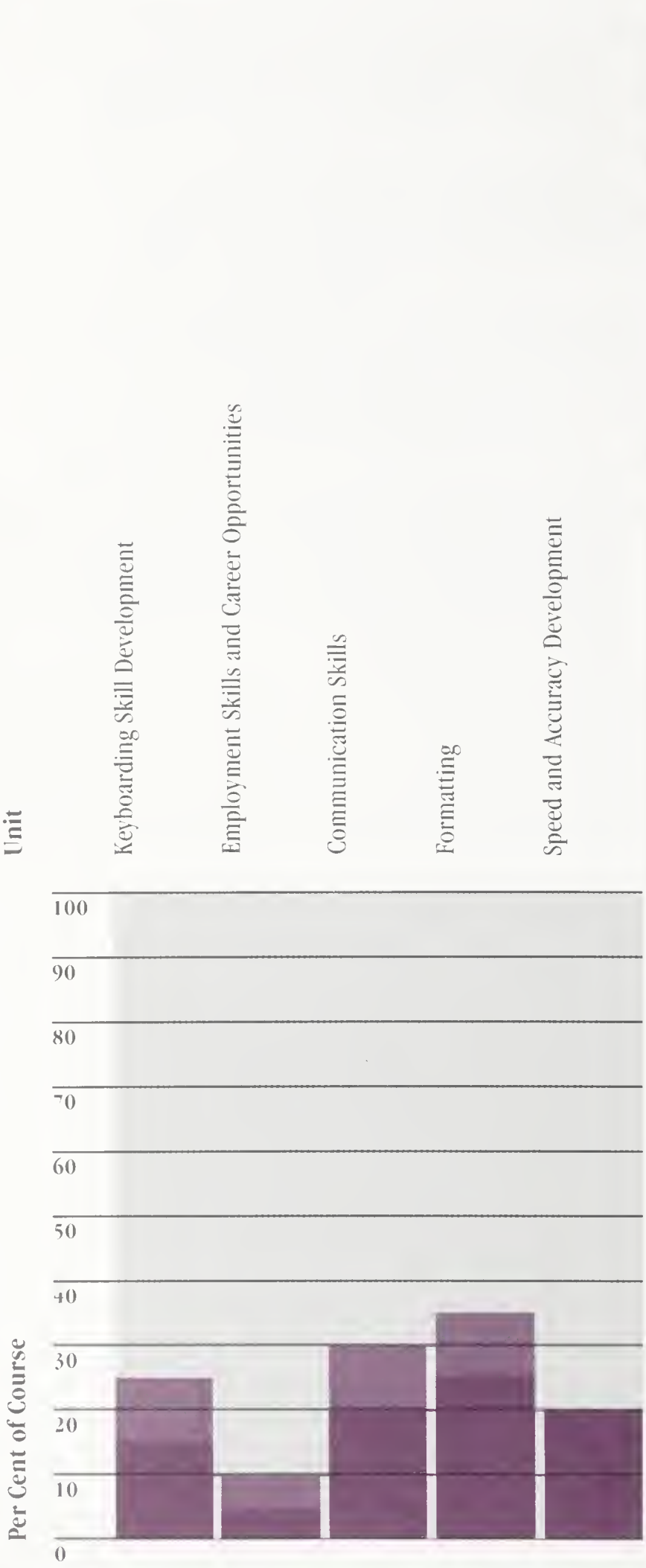
Keyboarding I, Advanced Level (BKI)

Introduction

Keyboarding will provide students with a communication-enhancing skill that is increasingly recognized as a tool of literacy. Over the next few years all students will use keyboards to take advantage of computer technology for personal communication needs and further educational endeavours. Keyboarding I is primarily a personal-use course; however, the successful completion of this course will provide a solid foundation for further studies in Keyboarding II and III. Students can earn one credit in this Intermediate Division course, for which there is no prerequisite.

Students should be provided with opportunities to:

- develop a touch system on alphabetic and number keys at an automatic level;
- master correct keying techniques;
- develop formatting skills;
- develop composition and language skills at the keyboard and use these skills to enhance their creative-writing activities;
- develop advanced proofreading and editing skills;
- develop those work habits that will enhance their education or career goals;
- develop speed and accuracy on alphabetic keys;
- identify job positions and personal applications that require keying skills.



Teaching and Assessment Strategies

The teaching and assessment strategies described here relate specifically to this course. Additional, more general strategies are included in the introduction to the keyboarding program and in the business studies policy document *Policy for Program Planning and Delivery*.

Initial teaching strategies should be directed towards helping students acquire and apply correct keying techniques. Students should learn correct posture, fingering, and the use of equipment components, as well as the technique of keying with eyes on the copy rather than on the keyboard; these are more important in the early stages of learning how to key than is a great degree of accuracy. The demonstration of keying procedures by the teacher is an important strategy in an introductory program. Students should be encouraged to model correct keying posture, hand position, key-stroking techniques, and equipment manipulation as demonstrated by the teacher.

The "eyes on copy" habit can be encouraged through the regular and consistent use of speed drills. These speed drills are best managed through the assignment of straight-copy exercises that are to be completed within a specific time period. These exercises should consist of short, one-line sentences in the early part of the course and simple paragraphs later on. Each speed-drill exercise should have an assigned time limit and should be repeated with the addition of one word (for one-line exercises) or one line (for simple paragraph exercises) each time. No additional time should be allowed for the completion of exercises with additional words or lines. Forcing students to key familiar practice material more quickly by stretching their speed one word or one line at a time will help them to develop and maintain the "eyes on copy" habit.

An emphasis on accurate keying should follow initial concentration on correct keying techniques. Students should be encouraged to continue to practise these techniques while directing their attention towards increasing their output, speed, and accuracy, as well as understanding and applying the principles involved in a variety of formatting activities.

Each keying lesson should be carefully planned to provide students with opportunities to drill and practise on review materials; to acquire and apply the skills necessary to add new keys, techniques, and formatting principles to their list of keying abilities; and to concentrate on developing greater facility with both speed and accuracy. Lessons should provide a frequent change of pace, opportunities for reinforcement, short but purposeful drills, self-competition for improved accuracy or speed, and opportunities to key from verbal cues.

All keying applications should be introduced through correctly keyed and formatted models. Clearly displayed keying instructions should be included, and students should be required to key a copy of the model, carefully following each instruction given. Eventually, using a step-by-step process, they should be able both to understand the formatting principles involved and to key copy from unarranged materials, making their own formatting decisions.

After the initial emphasis on the development of keying technique, consistent and controlled practice in speed, accuracy, formatting, and technique should be an important component of each keyboarding lesson. Straight-copy practice and keying-speed, accuracy, and technique drills, along with application assignments, should be emphasized on a regular basis.

In addition to regular assignments of copy keying and formatting, students should have opportunities to develop communication-related skills at the keyboard. They should be encouraged to create, revise, format, proofread, edit, and correct their communications at a keyboard. Regular proofreading exercises should be a part of all daily work assignments.

Students should be encouraged to participate in a keying club. They can prepare keyed materials for their personal use or for members of the school or business community. Where such a service is not practical, club members could concentrate on improving their keying speed and accuracy and participate in local keying competitions.

Students should also be encouraged to prepare and maintain an up-to-date notebook or manual that would include statements about techniques and formatting principles, step-by-step procedures for particular applications, and correctly keyed and formatted examples of all course assignments. Students should be required to organize and set up this manual so that it will be a useful and accurate reference for their in-school and out-of-school keying requirements.

Marks should be assigned only for technique during the early stages of this course. During the rest of the course technique should continue to be marked but with decreasing emphasis. In the second term, warm-ups, assignments, and tests should constitute the major part of student evaluation; minimal emphasis should be placed on subjective grading throughout the course, but students' grades should clearly reflect their progress in the development of keying skill.

Accuracy should not be marked until students have had an opportunity to complete the introductory lessons on the alphabetic and numeric keyboard and have had sufficient time for review and practice.

Warm-ups, administered daily for a minimum of five minutes, can be marked for accuracy and/or completion (for a maximum of 10 per cent of the total mark). Daily assignments can be collected at regular intervals once students have achieved competency in the skills or theory presented in each unit. When assessing, teachers should bear a variety of objectives in mind. For example, they can assess format, accuracy, appearance, proofreading, and/or the completeness of each assignment. Overall the assessment of the assignments given in this course should reflect an appropriate balance of emphasis on format, accuracy, appearance, and completeness of work. It is suggested that, by the end of the course, the following breakdown of marks be used for exercises that require keying, formatting, proofreading, and correcting of errors: out of a possible ten marks, six marks should be allotted for accurately keyed, proofread, and corrected copy and four marks for the correct application of formatting principles.

Speed and accuracy should be developed through regular drill and timed-writing practice. This practice should begin shortly after students have mastered the alphabetic keyboard. Timed-writing materials used for evaluation purposes should be of a syllabic intensity of 1.2. Students should start with one-minute practice sessions and progress to three- and ultimately five-minute timings. While informal timed-writing practice can begin immediately after students have completed the introduction to the alphabetic keyboard, formal assessment of this part of the course shall only occur within the last quarter of the course and shall be based on the best three five-minute timings. In order for students to achieve the timed-writing objective of this course, approximately eleven hours overall of course time should be allotted for skill development and timed-writing practice.

Tests should consist of a variety of the following: true-and-false, fill-in-the-blank, multiple-choice, short-answer, and keyed exercises. They should be administered immediately on completion of a unit and should follow sufficient student practice activities and evidence that the objectives of the unit to be covered in the test have been mastered adequately. Students should be encouraged to grade some of their own work as well as the work of other students in the class so that they become better able to assess their own keying abilities.

Notebooks should be evaluated at least once and perhaps as many as four times during the course, with emphasis placed on completeness, organization, and neatness. The marking of assignments, tests, and timed writings should be done on a regular basis, with assignments returned promptly to provide students with immediate feedback and reinforcement.

The following table outlines the core units of content for the course and the percentage of class time and relative emphasis for assessment purposes that should be allocated to each unit of content. Note that the sequencing of units is left to the discretion of the teacher. The percentages suggested here allow for the inclusion of optional material of local interest within each unit or as an additional unit.

Suggested Time and Evaluation Framework

Unit	Per Cent of Course
I. Keyboarding Skill Development	15–25
II. Employment Skills and Career Opportunities	5–10
III. Communication Skills	20–30
IV. Formatting	25–35
V. Speed and Accuracy Development	20

Course Content

The main items of course content for each unit are presented in bold-face type. Each of these is followed by more specific learning opportunities that relate to the main item of content. Note that all of the items outlined in bold face are core content.

I. Keyboarding Skill Development

Touch typing is defined as "keeping one's eyes on the material being copied while operating alphabetic, number, and punctuation keys, using correct fingering and operating function keys with proper control".

Correct keyboarding technique should be introduced early in this unit and should account for 50–60 per cent of the marks allotted to the unit. Technique should also be stressed throughout the remaining units but should be assigned decreasing emphasis in terms of evaluation so that it accounts for only about 10–15 per cent of the marks allotted to the fourth unit.

Core Content

Students will:

1. **develop mastery of the alphabetic and numeric keyboard using the touch system;**
   - understand the importance of accurately keyed letters and numbers (e.g., postal codes, social-insurance numbers, telephone numbers);
   - practise on a number keypad;
   - intensively practise using punctuation marks and common symbols;

2. **be aware of and demonstrate correct keying techniques throughout the course;**

   - practise correct fingering (placing fingers over the home keys; striking each key with a sharp, quick movement; stroking downwards towards the palm of the hand; releasing the key quickly and returning the finger quickly to the home keys);
   - practise correct posture (body erect, feet flat on the floor, fingers curved, wrists low and relaxed, forearms parallel to the keyboard, body a hand-span from the machine, eyes on copy);
   - demonstrate the correct use of equipment and its component parts, especially cursor control and function keys where word-processing equipment is available.

3. **understand the importance of ergonomics in the development of keying skills and techniques;**

   - identify the features of the equipment that they are using and the techniques for avoiding unnecessary stress or fatigue in using this equipment;
   - arrange their work station and chair at a proper height, position their materials on the work surface in order to manage their time and the work space efficiently, and properly light their work area.

II. Employment Skills and Career Opportunities

Core Content

Students will:

1. **demonstrate the personal and interpersonal skills that are essential to career success in a keyboarding environment;**

   - discuss and display throughout the course appropriate attitudes, performance standards, and human-relation skills;
   - incorporate effective thinking, listening, reading, writing, and speaking skills into all assignments;

2. **explore various careers that have a keying component;**

   - identify job positions and personal keying applications after listening to speakers, viewing films, taking individual or group field trips, and reading current literature;
   - key current newspaper articles;
   - research and key a report on a career of interest.

III. Communication Skills

Core Content
Students will:

- **use their ability to compose and key information and to revise, expand, assess, synthesize, convert, and translate at the keyboard;**
  - correctly use punctuation, grammar, spelling, capitalization, and number representation;
  - compose their thoughts and ideas at the keyboard, progressing from phrases, sentences, and short paragraphs to various kinds of personal communications (e.g., personal letters, lists, notes, and study guides produced from notes taken in other courses);
  - edit their output initially to make it technically correct and eventually to revise it so that their ideas are presented clearly, concisely, and accurately.

IV. Formatting

Core Content
Students will:

1. **make effective use of all of the special features of text-editing equipment and typewriters to compose, format, and edit text material from prewritten or predrafted copy, as well as from personal handwritten material, and produce text to acceptable standards;**
   - centre, both vertically and horizontally, materials such as memos, invitations, announcements, poems, and simple charts, using appropriate display techniques;
   - key on lines and forms;
   - key from models to produce one-page manuscripts correctly set up with footnotes, bibliographies, tables of content, and cover pages;
2. **proofread copy for keying and formatting errors and correct errors or rekey copy;**
   - proofread for content, grammar, punctuation, and spelling errors;
   - explore the positive and negative aspects of formatting using microtechnology.

Optional Content
Students will compose, key, and understand the function of a letter of application and a data sheet. If time allows, additional letter styles may be introduced.

V. Speed and Accuracy Development

Students using non-correcting keying equipment who achieve the end-of-course minimum objective of thirty gross words per minute shall earn 50 per cent of the total marks allotted for speed (five marks out of a maximum of ten marks). (See table 2 on page 10 of this document for a suggested speed-evaluation marking scale.)

Students who achieve the end-of-course minimum objective of five errors per five minutes of keying shall earn 50 per cent of the total marks allotted for accuracy (five out of a maximum of ten marks). (See table 3 on page 11 of this document.) This requirement may be modified for those students for whom this is not a realistic expectation.

If students are working on self-correcting equipment, speed and accuracy shall be evaluated together as net words per minute. (See table 4 on page 11 of this document for a suggested marking scale.)

Core Content
Students will:

1. **by the end of the course, develop their keying speed to meet a minimum objective of thirty gross words per minute on the average word count of the best three five-minute timed writings using non-correcting equipment, or thirty net words per minute on the average word count of their best three five-minute timed writings using self-correcting equipment. Timed-writing materials used for evaluation purposes shall have a syllabic intensity of 1.2;**
2. **by the end of the course, develop their accuracy control to meet a minimum objective of no more than one error per minute of keying;**
   - establish progressive personal goals for speed and accuracy as they strive to meet guideline requirements;
   - appreciate the importance of frequent and regular practice and the need for accuracy control;
   - log their personal progress.

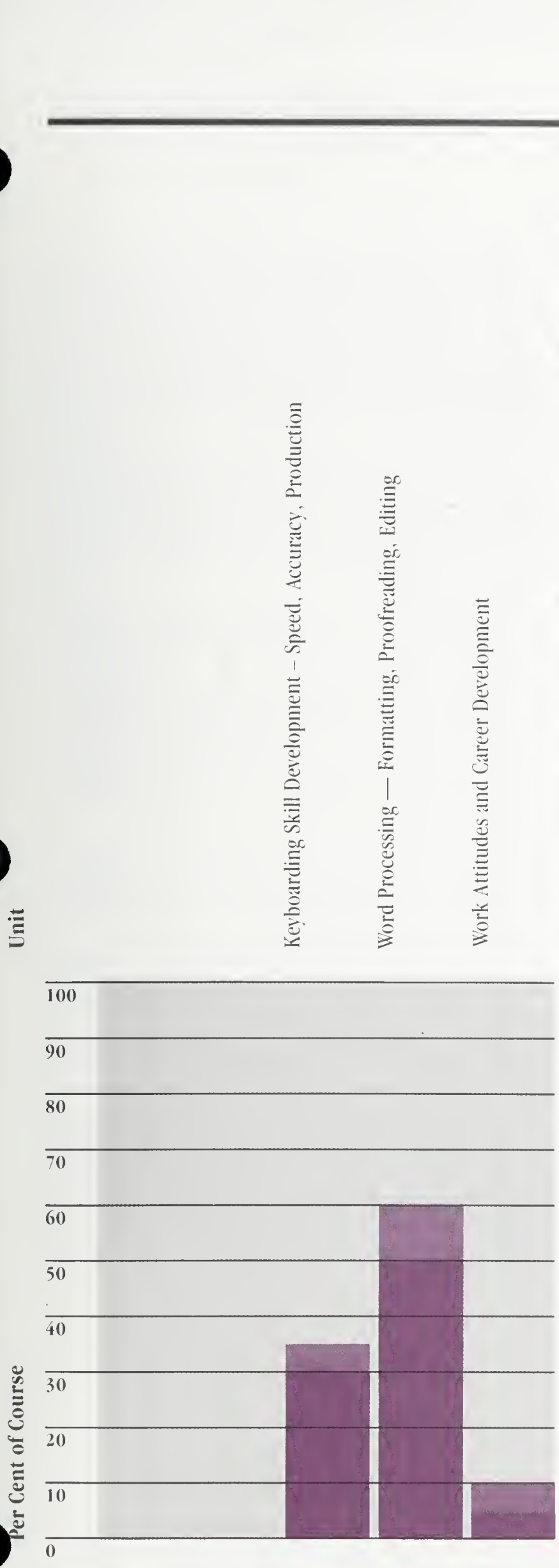
Keyboarding II, General or Advanced Level (BKA)

Introduction

This course, which may be offered in either the Intermediate or the Senior Division, will help students to develop a practical business-related keying skill. Speed and accuracy will be stressed, and students will be introduced to the concept of producing materials that meet both the speed and quality requirements of the business community. Students can earn one credit for this course, for which Keyboarding I at the general or advanced level is a prerequisite.

Students should be provided with opportunities to:

- develop keying proficiency;
- produce standard business communications that meet the expectations established by the business community;
- further develop their facility in composing business communications at the keyboard;
- enhance their self-image and demonstrate effective work habits and businesslike attitudes while working independently and with a minimum amount of direction;
- explore keying-related career paths and practise the work habits that they will require for success in the workplace.



Teaching and Assessment Strategies

The teaching and assessment strategies described here relate specifically to this course. Additional, more general strategies are included in the introduction to the keyboarding program and in the business studies policy document, *Policy for Program Planning and Delivery*.

In the development of speed and accuracy, an emphasis should be placed on increasing students' individual abilities. Students should strive to attain an average of forty gross words per minute on the basis of their best three five-minute timings. The materials used for evaluating students' timed-writing abilities shall have a syllabic intensity of 1.4 at the general level of difficulty and 1.5 at the advanced level.

Warm-ups and other drills should be used regularly to increase students' speed and accuracy. Sustained timed writings on straight-copy material and sustained practice on production material should be emphasized.

Production work should include a variety of materials chosen to familiarize students with proofreaders' marks and the process of correcting material to create mailable copy. Time limits should be generous in the initial stages to avoid frustrating students. They can be decreased by the midpoint of the course, when students will be expected to produce error-free final-copy letters, memos, and short reports at the minimum of thirty production words per minute, based on five- to ten-minute timings. It is suggested that each school board may wish to originate a common marking scale for production word count, similar to the speed-evaluation charts (tables 2 and 4) on pages 10 and 11 of this document, with a specific number of words to be deducted for each uncorrected error. A board production-work scale should reflect a slightly lower expectation than that for straight-copy timed-writing achievement but should also recognize the importance of establishing a realistic goal for production performance.

Students should be trained to produce mailable copy from rough drafts, handwritten copies, and edited copies of business letters, memos, reports, forms, tables, and financial statements. Typed classroom assignments that involve business communications, proofreading, and editing can be completed inside or outside of class, as considered appropriate.

Teachers should begin by giving students specific detailed instructions and progress towards learning that is more student-centred. Ultimately, students should use their skills in listening, thinking, reading, speaking, and organizing to complete assignments with a minimum of teacher instruction.

Students should be involved in the proofreading, editing, revising, and evaluating of both their own work and the work of others. They can develop competency in these areas through specific individual or small-group practice sessions, working on their own business correspondence or other specially prepared materials. These skills must be an integral part of the course work, and their development an ongoing process throughout the program.

Students could be exposed to current developments in keying technology through equipment demonstrations, intraschool visits, films, slides, charts, and models. Whenever possible, students should be involved in school-based, course-related work experiences in the school's practice office, main office, library, and clubs, and on its newspaper and yearbook.

Student work should be collected and assessed regularly to ensure that students comprehend the material presented. Technique should be stressed initially, and it should be emphasized in all other activities as the course progresses. Formatting skills should be tested regularly, along with the accuracy of the copy keying. The materials used for assessment purposes should include handwritten, unformatted, and revised copy.

The following table outlines the core units of content for the course and the percentage of class time and relative emphasis for assessment purposes that should be allocated to each unit of content. Note that the sequencing of units is left to the discretion of the teacher. The percentages suggested here allow for the inclusion of optional material of local interest within each unit or as an additional unit.

Suggested Time and Evaluation Framework

Unit	Per Cent of Course
I. Keyboarding Skill Development – Speed, Accuracy, Production	30–35
II. Word Processing – Formatting, Proofreading, Editing	50–60
III. Work Attitudes and Career Development	5–10

It is expected that Keyboarding II offered at an advanced level of difficulty will generally follow the same time and overall evaluation outline as Keyboarding II offered at the general level. However, in the advanced-level program, students will be expected to develop their keyboarding skills using materials that are more complex, abstract, and theoretical. They will be expected to record information, compose, proofread, and edit business correspondence of a more technical nature. Within a given set of parameters, they will classify documents and make decisions about the data and text information to be recorded, entered, and purged. Students in an advanced-level Keyboarding II course will be expected to interact with business-application software and to prepare financial and statistical statements accurately and in an appropriate format.

Course Content

The main items of course content for each unit are presented in bold-face type. Each of these is followed by more specific learning opportunities that relate to the main item of content. Note that all of the items outlined in bold face are core content.

I. Keyboarding Skill Development – Speed, Accuracy, Production

Students using non-correcting keying equipment who achieve the end-of-course minimum objective of forty gross words per minute shall earn 50 per cent of the total marks allotted for speed (five marks out of a maximum of ten marks). (See table 2 on page 10 of this document for a suggested speed-evaluation marking scale.)

Students who achieve the end-of-course minimum objective of five errors per five minutes of keying shall earn 50 per cent of the total marks allotted for accuracy (five out of a maximum of ten marks). (See table 3 on page 11 of this document.) This requirement may be modified for those students for whom this is not a realistic expectation.

If students are working on self-correcting equipment, speed and accuracy shall be evaluated together as net words per minute. (See table 4 on page 11 of this document for a suggested marking scale.)

Production should be assessed only in term II. See the "Teaching and Assessment Strategies" section of this course for suggested methods of development and assessment.

Core Content
Students will:

1. **by the end of the course, develop their keying speed to meet a minimum expectation of forty gross words per minute on the average word count of their best three five-minute timed writings using non-correcting equipment, or forty net words per minute on the average word count of their best three five-minute timed writings using self-correcting equipment. The materials used for timed writings shall be at a minimum syllabic intensity of 1.4 at the general level of difficulty and 1.5 at the advanced level;**
2. **by the end of the course, develop their accuracy control to meet a minimum objective of no more than one error per minute of keying;**
3. **produce error-free or error-corrected business communications in the form of simple letters, memoranda, and brief reports in order to meet a *minimum passing* production standard, based on a scale produced at the local board level, on five- and ten-minute timings. The materials used for production timings should begin with formatted text and progress to unformatted but clear and easy-to-read text. No editing or revision work should be presented for production testing at this level.**

II. Word Processing – Proofreading, Formatting, Editing

Core Content
Students will:

1. **produce common forms of business communications from printed text, rough drafts, handwritten copy, and edited materials to an acceptable business standard and on various types of equipment;**
   - format in an acceptable style and key business letters of one and two pages, memoranda, form letters and envelopes, business reports (including cover page, contents page, footnotes, and bibliography), forms, tables, and financial statements;
   - learn two business-letter styles – full and semiblock, with both open and two-point punctuation – and the correct use of the following parts of a business letter: date line, inside address, attention line, salutation, subject line, body, closing, company name, signer's identification, reference initials, enclosure, copy notation (a standard line length of sixty strokes should be used for business letters);
2. **compose short business letters and memoranda in response to simple business inquiries;**
   - draft and revise letters and memoranda and key the final copy;

3. **proofread and edit their work carefully, making appropriate corrections to all completed assignments;**

   - proofread their own and other students' work individually or in group settings;

4. **manage the completion of their own assignments by identifying smaller component units, arranging these units in order of priority, and maintaining both quality of work and efficient use of time;**

   - discuss, develop, and apply time-management skills;

5. **develop their ability to listen to and follow instructions, think and speak clearly, read carefully, comprehend, and complete assignments according to instructions;**

   - assess their own work and the work of others in terms of the accuracy of the content and its completion according to instruction.

III. Work Attitudes and Career Development

Core Content
Students will:

1. **produce classroom assignments that meet the standards established by the business community;**

   - apply their acquired skills to the production of work in the quantity and at the level of quality expected by the business community;
   - demonstrate appropriate personal attitudes (e.g., honesty, co-operation, punctuality, initiative, reliability) and interpersonal skills;
   - demonstrate a respect for the rights of others to work without interruption;

2. **identify a range of careers that require a combination of the keying skills and work attitudes developed in this program;**

   - key essays, newspaper articles, and reports that contain content related to changes in career opportunities;
   - research and key a report on a career of interest to them;
   - listen to speakers, view films, and read current literature on careers, and visit businesses in the community.

Keyboarding III, General or Advanced Level (BKW)

Introduction

This course will help Senior Division students to develop their keying and communication skills to meet job-entry-level expectations. Using a variety of office equipment, including machine transcribers and automatic text-editing equipment, students will acquire an appreciation of the concepts of information processing and the role that it plays in the business office. Students may earn one credit for the successful completion of this course, for which Keyboarding II, General or Advanced Level is a prerequisite.

Students should be provided with opportunities to:

- increase their keying, data-entry, and communication skills to a marketable level;
- effectively use a range of office information-processing equipment, including data-entry, text-editing, and formatting software, as well as machine transcribers;
- develop the ability to process business information efficiently through the integration of a variety of skills and procedures;
- identify career opportunities and make plans to follow up on them;
- model businesslike habits and attitudes that are conducive to success on the job.

Teaching and Assessment Strategies

The teaching and assessment strategies described here relate specifically to this course. Additional, more general strategies are included in the introduction to the keyboarding program and in the business studies policy document, *Policy for Program Planning and Delivery.*

Today's educators have the challenge of integrating new equipment and procedures into a curriculum to meet the changes that are taking place in business and industry. It is critical to the delivery of this course that the equipment required to support the core content be available for student use. Students will have to learn how to use automated equipment efficiently and acquire the skills of editing, proofreading, and formatting. A conscious effort must be made to integrate language skills and information-processing concepts into the curriculum and to help students develop work habits to prepare for job-entry positions.

A structured classroom routine that includes regular warm-up drills and skill-building exercises should be established. Punctuality and regular attendance should be encouraged to promote a positive attitude towards arriving on time and starting immediately on the work at hand.

The appointment of a classroom secretary, manager, proofreader, and student assistant will help to build responsibility and could be of great assistance in class management. These assignments could be rotated on a regular basis to expose all students to the requirements of these responsibilities. Job descriptions and role-performance criteria should be clearly identified for these positions.

Routines should be established for keeping records on equipment and listing necessary repairs. Rotation schedules could be established for the use of equipment both during class and for out-of-class time. Teachers should establish proper methods for handling equipment, including replacing ribbons and cleaning equipment. Students should be expected to keep their work stations clean and neat. They should be expected to care for equipment, textbooks, and reference material and to handle them in a safe, responsible manner.

Working on group or individual projects, students can research various kinds of records management, types of word-processing equipment and text editors (e.g., stand-alone, shared-logic, microcomputers), ergonomics, and office organization. The importance of daily accuracy- and speed-building practice should be stressed, and student progress charted. Work habits should be evaluated, and students should be responsible for establishing files for work in progress and work completed.

Students can be encouraged to build a glossary that includes troublesome words and business vocabulary. They can complete exercises that will help them develop their grammar and punctuation skills and practise composing messages and letters that are concise and clear. Documents can be assigned for formatting, revising, editing, storing, recalling, and printing. Students can log their work and measure their productivity on a variety of materials. An instructional manual to be used with the machines can be developed for quick reference. Transcription exercises can be assigned and, after students are familiar with them, they can be timed. Work-related experiences can be incorporated into the course through the use of in-basket exercises, simulations, the practice office, and actual work experience.

A reference manual can be maintained for communication skills, operation sheets, sample letters, special instructions, proofreaders' marks, job descriptions, and data sheets.

Work-flow charts and forms should be kept by students and attached to documents as they move from one individual to another until the work is completed. Students should make use of the reference materials in the school resource centre.

Students can work in a practice office on a rotational basis. They may also be assigned to work in the school office or resource centre. Some students may act as secretaries to other teachers or department heads.

Students could also be sent out of the school on work-experience or co-operative education programs. The business community can provide such opportunities, as well as awards and certificates, films, tours, field trips, and speakers.

Some form of drill work should be assigned on a regular basis. Such work might include concentrated proficiency drills, speed-drive drills, and proofreading. Drills may also be used for language-skill development (e.g., grammar, capitalization, spelling, vocabulary). Speed should be developed through timed writings, timed production work, and timed transcription work.

Timed writings should be a regular part of the class routine. The speed and accuracy rates outlined earlier in this guideline are the performance goals for the end of the course. Students should be encouraged to maintain a personal speed-and-accuracy-record chart and establish personal goals for improvement in this area.

Decision-making and time-management skill development could consist of class, group, or individual planning to decide on and meet deadlines for any given assignment.

Throughout the course an emphasis should be placed on the mastery of special function keys (e.g., command or code keys on text editors or computers, correcting keys, cursor keys).

Timed-production keying exercises should be regularly assigned. These could consist of letters, memoranda, tables, reports, or display work that involve working from handwritten, unformatted, and revised copy materials. It is suggested that each school board originate a common marking scale for production word count, similar to the speed-evaluation charts (tables 2 and 4) on pages 10 and 11 of this document, with a specific number of production words to be deducted for each uncorrected error. Care should be taken to ensure that the marking scale established for production work reflects a slightly lower expectation than that established for straight-copy timed writing but that it also reflects the importance of establishing realistic goals for students in this course.

Communication skills can be developed by having students complete assignments in which they must follow both oral and written instructions given by the teacher or by other students. In such cases instructions should not be repeated, and further assistance should not be given. Students should also be expected to use reference materials independently.

The emphasis in evaluation in this course is placed on the demonstration of speed, accuracy, and transcription and communication skills. Theory can be evaluated through fill-in-the-blanks, short-answer, true-and-false, and multiple-choice tests.

Major assignments involving such activities as research into job markets or the equipment used by businesses, surveys of businesses, or interviews with businesspeople about job descriptions can be given to groups or individuals. Units of work or simulations may also be classed as major assignments. These should be assigned mainly on an individual basis and marked for content, completeness, organization, and accuracy. Mailable-quality results should be stressed for production assignments.

Minor assignments might be marked on a daily basis and could include exercises for the development of communication skills and for the reinforcement of newly learned formatting, transcription, and information-processing skills. A dual-marking scheme can be used for the marking of assignments. In such cases one mark can be assigned for keying and the other for formatting or content.

Notebooks and procedures manuals should be marked periodically for neatness, organization, and completeness.

The following table outlines the core units of content for the course and the percentage of class time and relative emphasis for assessment purposes that should be allocated to each unit of content. Note that the sequencing of units is left to the discretion of the teacher. The percentages suggested here allow for the inclusion of optional material of local interest within each unit or as an additional unit.

Suggested Time and Evaluation Framework

Unit	Per Cent of Course
I. Keyboarding Skill Development – Speed, Accuracy, Production	30–40
II. Machine Transcription	20–30
III. Information Processing	20–40
IV. Communication and Employability	5–10

It is expected that Keyboarding III offered at the advanced level of difficulty will generally follow the same time and overall evaluation outline as Keyboarding III offered at the general level. However, in the advanced-level program, students will be expected to develop their keying skills using materials that are more complex, abstract, and theoretical. They will be expected to record information and compose, proofread, and edit business correspondence of a more technical nature. Within a given set of parameters, they will classify documents and make decisions about data and text information to be recorded, entered, and purged. Students in an advanced-level Keyboarding III course will be expected to interact with business-application software and to prepare financial and statistical statements accurately and in an appropriate format.

Course Content

The main items of course content for each unit are presented in bold-face type. Each of these is followed by more specific learning opportunities that relate to the main item of content. Note that all of the items outlined in bold face are core content.

I. Keyboarding Skill Development – Speed, Accuracy, Production

Students using non-correcting keying equipment who achieve the end-of-course minimum objective of fifty gross words per minute shall earn 50 per cent of the total marks allotted for speed (five marks out of a maximum of ten marks). (See table 2 on page 10 of this document for a suggested speed-evaluation marking scale.)

Students who achieve the end-of-course minimum objective of five errors per five minutes of keying shall earn 50 per cent of the total marks allotted for accuracy (five out of a maximum of ten marks). (See table 3 on page 11 of this document.) This requirement may be modified for those students for whom this is not a realistic expectation.

If students are working on self-correcting equipment, speed and accuracy shall be evaluated together as net words per minute. (See table 4 on page 11 of this document for a suggested marking scale.)

Core Content
Students will:

1. **by the end of the course, develop their keying speed to meet a minimum expectation of fifty gross words per minute on the average word count of their best three five-minute timed writings using non-correcting equipment, or forty net words per minute on the average word count of their best three five-minute timed writings using self-correcting equipment. The materials used for evaluation purposes shall have a syllabic intensity of 1.5 at the general level of difficulty and 1.6 at the advanced level;**
2. **by the end of the course, develop their accuracy control to meet a minimum objective of no more than one error per minute of keying;**
3. **produce error-free or error-corrected business letters, memoranda, reports, and simple tables in order to meet a *minimum passing* production standard according to a scale established at the local board level. The materials used for production work should include unformatted and handwritten material and materials edited for revision. (See the "Teaching and Assessment Strategies" section for this course for additional suggestions on production development and evaluation.)**

II. Machine Transcription

See the "Teaching and Assessment Strategies" section for Keyboarding III, Basic Level for suggestions on the development and evaluation of transcription skills.

Core Content
Students will:

1. **produce mailable business correspondence using machine-transcription equipment;**
   - practise organizing a work station efficiently;
   - develop speed and accuracy in handling the equipment as well as ease and confidence with the English language;
   - practise initially on words, sentences, and short paragraphs and later with one- and two-page letters, business reports, and memoranda;
   - understand the importance of a team approach between the originator and the transcriber;
2. **identify appropriate machine-transcription follow-up procedures;**
   - understand their responsibilities concerning the distribution and retention of dictated material (i.e., preparing envelopes, filing copies, preparing materials for signature, preparing enclosures, coding documents for speed in retrieving).

III. Information Processing

Core Content
Students will:

1. **produce mailable business letters, memoranda, reports, statistical tables, and financial statements using text-editing and text-formatting software;**
   - identify and demonstrate efficient desk management;
   - demonstrate the ability to work in teams to complete large assignments, sharing the responsibility for the whole assignment, delegating and accepting smaller-task assignments, establishing time lines, and planning for the completion of the assignment;
2. **execute data-entry functions to produce financial statements and reports;**
   - use prearranged and reclassified information to execute sales, purchasing, cash-receipt, cash-payment, and general-journal transactions;
   - become familiar with both the kinds of information to be entered and the software packages required in classifying, selecting, and entering data from packages providing a variety of information.

IV. Communication and Employability

Core Content
Students will:

1. **accept responsibility for the completeness and accuracy of their work and for their work habits, attitudes, and commitment;**
   - complete assignments that demonstrate their ability to listen to and follow instructions; think and speak clearly; and read and understand instructions regarding procedures;
   - proofread their work for formatting, keying, and language errors and present mailable business communications;
   - maintain the attitudes, deportment, and good work habits that they will require in order to take on a job in an office environment;
2. **become aware of information-processing systems and discuss the responsibilities of each member involved in the unit;**
   - develop the ability to proofread the work of other members of the team and, when necessary, use tact and diplomacy to initiate changes in an information-processing unit.

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