MINISTERIO of EDUCACIÓN PÚBLICA
Departamento of Especialidades Técnicas.

SECTOR
COMMERCIAL AND SERVICES

LOGISTICS ADMINISTRATION AND DISTRIBUTION PROGRAM

CURRICULAR DESIGN BASED ON THE COMPETENCY STANDARDS
EDUCATIONAL MODEL

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MINISTERIO of EDUCACIÓN PÚBLICA
Departamento of Especialidades Técnicas.

SECTOR
COMMERCIAL AND SERVICES

PROGRAM
LOGISTICS ADMINISTRATION AND DISTRIBUTION

TWELFTH GRADE
CURRICULAR DESIGN BASED ON THE COMPETENCY STANDARDS
EDUCATIONAL MODEL

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CROSS CURRICULAR THEMES IN STUDY PROGRAMS

Social, economic, cultural, scientific, environmental and technological changes in today's world have made it necessary for educational curricula to not only offer knowledge and information, but also to encourage the development of values, attitudes and skills aimed at improving the quality of life of individuals and societies (*Marco de Acción Regional de "Educación para Todos en las Américas",* Santo Domingo, 2000). Nonetheless, our educational system faces a real challenge as new subject areas or contents linked to emerging issues relevant to our society must be incorporated, and there is a risk of overloading and fragmenting the curriculum.

Cross curricular themes are an alternative to these limitations. They are understood as "an educational approach that benefits from the opportunities generated by the curriculum by incorporating meaningful learning skills into the design, development, assessment and curriculum management so as to integrate and foster improvement in the life of individuals and society as a whole. Cross curricular themes are holistic, axiological, interdisciplinary and contextualized in nature."(*Comisión Nacional Ampliada de Transversalidad* 2002).

Pursuant to the guidelines set out by the *Consejo Superior de Educación* (SE 339-2003), the only transversal theme in the Costa Rican educational system is that of values. Hence, a systematic approach to values in our domestic curriculum aims to promote the learner's socio-emotional and ethical development from the humanistic focus set out in the educational policy and in the *Ley Fundamental de Educación* (Basic Education Act).

The following cross curricular issues have been defined based on the transversal theme of values and the obligations assumed by government under existing legislation: Environmental Culture for Sustainable Development, Integral Sex Education, Health Education and Experience of Human Rights Democracy and Peace.

A series of competencies has been established for every transversal theme for students to develop throughout their educational training. These competencies are construed as: "An integrated combination of knowledge, procedures, attitudes and values enabling learners to successfully and autonomously handle individual and social situations." (*Comisión Nacional Ampliada de Transversalidad*, 2002). Such competencies are expected to guide educational processes and the development of cross curricular themes.

With the competency perspective as a guide, cross-curricular competencies have been defined as follows: "those that span and penetrate all curricular subjects, horizontally and vertically, and require the integrated and coordinated support

of all academic disciplines, as well as coordinated pedagogical action" (Beatriz Castellanos, 2002). In this fashion, these competencies appear in annual plans as well as in every other aspect of the educational system.

Following is a summary of each cross-curricular theme with its respective competencies:

Environmental Culture for Sustainable Development

Environmental education is considered to be the ideal instrument for building of an environmental culture of individuals and societies oriented toward sustainable human development. This is a function of the process that helps them understand their interdependence with the environment through critical analysis of and reflection on their immediate reality, whether biophysical, social, economic, political or cultural.

The objective of environmental education is that students take ownership of reality through activities based on values and respect, making them active participants in hence promoting the active involvement in problem identification and resolution at the local level, but with a global vision.

Competencies to be developed

- Applies knowledge acquired through critical and discerning processes of reality to solve problems of different nature (environmental, economic, social, political, and ethical) in a creative manner; adopts attitudes, practices and values that help to achieve sustainable development and a better quality of life.
- Actively and responsibly engages in projects aimed at the preservation, restoration and protection of the environment by identifying major issues and needs, creating and developing alternative solutions to help improve quality of life of the individual as well as that of others, and contributing to sustainable development.
- Engages in harmonious relationships with him/herself, others, and all other living beings through responsible attitudes and skills, and by accepting the need for interdependence with the environment.

Integral Sex Education

According to the " Políticas de Educación Integral de la Expresión de la Sexualidad Humana**",** (2001), experiencing human sexuality in a mature way is dependent upon an integrated approach to sex education that includes all aspects, such as physical, biological, psychological, socio-cultural, ethical and spiritual . Sexuality cannot be reduced to simply biological reproduction considered in a context devoid of values, ethical and moral principles regarding life, love, family and coexistence.

Sex education starts in early childhood and continues throughout life. At first, it is a right and a duty of parents. Later on, government, in a subsidiary action, is required to strengthen the involvement of families in the education and informing of their children, as expressed in the *Código de la Niñez y la Adolescencia* (Law on Childhood and Adolescence).

The educational system must ensure pedagogical experiences and strategies that respond to the students' potentialities in line with their development stage and the socio-cultural contexts in which they operate.

Competencies to be developed:

- Socializes with men and women alike; is supportive and respects diversity.
- Makes decisions regarding sexuality from a life plan based on critical self-knowledge and socio-cultural, ethical and moral values.
- Faces situations involving harassment, abuse and violence by identifying appropriate internal and external resources.
- Expresses his/her identity in an authentic, responsible and comprehensive manner by encouraging personal development in a context of interaction and permanent expression of feelings, attitudes, thoughts, opinions and rights.
- Promotes thoughtful and constructive processes within his/her family, and dignifies his/her condition of human being so as to identify and propose solutions according to the sociocultural context in which he/she operates.

Health Education

Health education is a fundamental right of children and adolescents. Overall health is closely related to school performance and general quality of life. So, by working on education to achieve health in schools, based on the needs of the student population at each development stage, we prepare citizens with healthy lifestyles, as a result, people who build and seek to have quality of life for themselves and for those around them.

Health education should be a social, organized, dynamic and systematic process that motivates and guides individuals to develop, strengthen, modify or replace existing practices with healthier ones, whether it be on an individual, the family, or under collective basis and also taking into account their relationship with the environment.

Therefore, health education in the school context is not limited to the transmission of information, but also seeks to develop knowledge, skills and abilities that contribute to the social production of health, using teaching processes and dynamics that prioritize two-way communication, critical thinking and active student participation.

Competencies to be developed:
- Lifestyle that allows them to critically and thoughtfully maintain and improve their overall health and quality of life, and that of others
- Decisions that enhance their overall health and that of those around them through self-knowledge and understanding of those around them, as well as the environment in which he/she operates.
- Process of critical thinking, chooses the most adequate personal means to deal with situations of risk and identify corresponding elements of protection.
- Use of healthcare, education and community services in a responsible, critical and participative; personal commitment to improvement of these services.

Experience of Human Rights Democracy and Peace

Costa Rica is a consolidated democracy, but it is always in a state of constant review and feedback; as a result, the relevance of human rights is part of our commitment to reinforcing a culture of peace and democracy.

In educational settings, it is appropriate to manage mechanisms that foster the involvement of citizens at family, community, institutional and national levels. To do this, civil society must be informed and trained in regards to the legal framework provided by the country, so that the involvement of citizens is effective and not limited to periodic participation in elections.

A democratic system that helps turn citizenship into an appealing, interesting and civic activity is required, that entails rights and duties alike.

Competencies to be developed

- Practices his/her rights and responsibilities by living in a democratic, ethical, tolerant and peaceful way.
- Accepts his/her own reality, as an individual subject to rights and responsibilities.
- Makes personal, family and social choices that encourage tolerance, justice and gender equality according to the contexts in which he/she operates.
- Takes part in inclusive actions that promote equality in all sociocultural contexts.
- Exercises rights and responsibilities that foster democratic coexistence and a culture of peace.
- Is tolerant, accepts and understands cultural, religious and ethnic differences that encourage democratic coexistence and a culture of peace.
- Values the cultural differences found in different lifestyles.
- Engages in actions, attitudes and behaviors directed to nonviolence in school settings, in the relationship with the parents, the family and the community by solving conflicts in a peaceful way and by expressing affection, tenderness and love.
- Applies strategies for the peaceful resolution of conflicts in different contexts.
- Respects individual, cultural, ethical, social and generational differences.

Methodological Approach to Cross Curricular Themes through Study Programs and Educational Planning

As a process, cross curricular themes are meant to be part of the programmatic work of our national education system, from the current study programs to the educational planning that instructors carry out in the classroom.

Regarding to the study program, some procedures and values might lend themselves to the incorporation of cross curricular themes. However, convergence options are not limited to those mentioned in the programs as instructors can identify other possibilities for the development of cross curricular processes.

In this case, the task is for instructors to identify which of the study programs' objectives represent opportunities to address cross cultural issues and develop competencies based on a thorough reading of the students' prior knowledge, the sociocultural context, and relevant and current social events.

As for educational planning, cross curricular themes should be listed in the "Mediation Activities" and "Values and Attitudes" columns once the identification in the study programs has taken place. In the classroom, the cross curricular process should take into account the characteristics of the student population, as well as characteristics of the immediate environment in order to create more meaningful learning experiences.

In addition to educational planning, cross curricular themes ought to be conceived and specified in the institutional plan, thus promoting the active, critical and thoughtful involvement of parents and legal guardians, community leaders, community action organizations, instructors, administrative personnel and the whole educational community.

In this sense, schools should make the corresponding decisions to ensure consistency between everyday institutional practice and cross curricular themes, and principles. Ultimately, this poses a major challenge for every school towards the development of humanistic, critical and ecological principles.

CROSS CURRICULAR THEMES COMMITTEE

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EDUCATION AND DIVERSITY

Educational reforms and the diverse educational needs of our students demand new skills from teachers, and these skills must be acquired through constant and intentional effort. In Costa Rica, we have made great efforts to train teachers, and we have seen significant changes in classroom practice and teaching quality.

Teaching is a profession and an art that requires constant learning. Teachers must be "eternal apprentices", constantly building new knowledge in order to solve situations and problems. This concept of teacher as learner is one of the guiding principles behind the creating of education and diversity materials, as well as the development of curricular proposals that take diversity into account.

Most teachers have been trained, and continue to be trained, from a very homogenous educational approach that works by transmitting fragmented knowledge to students. These teachers are then further trained in courses or workshops in order to sensitize them to the concept of inclusive education. In other words, training must focus on the professional development of teachers regarding their role and functions as teachers in a modern and technological era.

From this perspective, technical education in the classroom relies on a solid methodology and the organization of teaching and classroom management in order to promote the following competencies: (Mauri, T 2002):

- Full competence of teachers in information resources, social abilities, cognitive and linguistic skills that allows them to adapt to change.
- The formation of ethical values and morals is also key to equal opportunities and social justice.
- Capacity for innovation to improve teaching practice through reflective processes, research and individual action.
- Learning requires consideration of context and the real problems faced by our students. .

Therefore, vocational technical teachers must possess the knowledge, skills and attitudes necessary to enable them to handle diversity, to work with secondary students from diverse vocational specializations and social or cultural contexts with different capabilities, rhythms and learning styles.

MINISTERIO of EDUCACIÓN PÚBLICA
Departamento of Especialidades Técnicas.

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The Ministry of Public Education and, specifically, the Technical Specialties Department hereby wishes to thank all of the participating professionals for their most valuable contributions to the Counseling. This way, a program is being delivered in compliance with the essential requirements for young learners to successfully perform in the labor market after graduating.
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This program expands the array of training possibilities in professional technical schools and job opportunities for graduating students.

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Departamento of Especialidades Técnicas.

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BACKGROUND

The specialization LOGISTICS ADMINISTRATION AND DISTRIBUTION is part of the educational offer of the *Dirección de Educación Técnica y Capacidades Emprendedoras* (Office of Technical Education and Entrepreneurial Capacities) of the Ministry of Public Education and was created in order to fill a need in the labor market, thereby improving the economic potential of the country.

For many years, the country has been experiencing a series of radical changes in its productive base, provoking the development of new areas of study, and changes in existing areas.

This has affected people who work in supply chain related companies in this country, who have seen increases in activity and in the specialization of these activities.

As a response to this increase in activity and specialization, this Office has decided to look for ways to satisfy this demand in the most efficient and timely fashion possible. To this end, we have developed strategic alliances with the country's employers in order to define the required level of technical quality in the labor force serving our country.

These strategic alliances were key in the detection of the necessity for a new academic specialization that covers themes such as LOGISTICS ADMINISTRATION AND DISTRIBUTION for companies in general, not just those in the areas of customs and/or logistics.

With the help of CINDE, we consulted the job-creating sector in the country in order to delineate the subject areas, units of study, learning outcomes, contents, values and pedagogical strategies that form this program of study.

Equally important was the validation and support given by the *Universidad Técnica Nacional* (UTN), which has supported the creation of the specialization through its work in the area of quality and quality criteria.

We can say; in general terms, that this specialization trains technicians qualified to work in areas such as purchasing, inventory management, and imports / exports, doing so with a sense of customer service, understanding of values and information technologies while improving the effectiveness and productivity of the companies in which they work.

The success of this program is possible only through the wisdom of those who will teach it, who must obtain maximum effort and results from their students for their individual well-being and the collective welfare of the nation.

RATIONALE

This Office has elected to offer the specialization of LOGISTICS ADMINISTRATION AND DISTRIBUTION as the result of input and recommendations from companies. This process of input has resulted in the creation of a new vocational profile, with its corresponding objectives and program contents and curricular structure.

This curricular modification is a result of the constant change in the labor market.

The field of customs management is a dominant topic in the field of human resource training, and its popularity is due to several factors. On one hand, is the relative ease with which the content can be taught, and on the other, is the relative ease with which professionals in this area insert themselves into the labor market. There is a constant need for professionals in LOGISTICS ADMINISTRATION AND DISTRIBUTION to help management of small, medium and large companies make correct business decisions.

The objective of this specialization is to respond to a series of labor requirements in the areas of industrial engineering and customs administration with an emphasis in productive processes and import/export of products that will contribute to the creation of companies able to participate efficiently in a world of complex relations and vertiginous changes.
The design of this program is the result of arguments presented in regional discussions with companies during 2011 and 2012.

Description of program subjects:

Compras: Determinar todo lo relacionado al proceso de compra internacional y los medios de pago para esos efectos utilizados sin dejar de considerar el régimen de zona franca que se desarrolló en el país, mas aún despúes de la implementación de varios Tratados de Libre Comercio.

Imports and Exports: integral development of the import/export process (taking into account the corresponding permit processes), product classification related to tariff schemes, use of software specific to customs processes, (TICA, GEMA, ZAGAF).

Logistics: covers the use of technology to facilitate work in the customs areas, fostering an anti-money laundering culture and the implementation of Supply Chain processes and concept of operations management.

Inventory Management: recognizes the process of planning, scheduling and administration of inventory in a company, creating links with customs processes.

Operations Administration: explains manufacturing plant design and its relation with supply chain concepts and production capacity planning, focusing on productivity.

Operaciones de manufactura: Desarrollar procesos que involucren operaciones de manufactura utilizando la administración del tiempo como elemento clave para lograr dichos procesos mas eficientemente.

Manufacturing Operations: develops processes related to manufacturing operations, using time management as a key part of maximizing the efficiency of processes.

English for Communication: delivered with a communicative approach to facilitate the integral education of students, through a process of meaningful and dynamic learning that permits technical vocabulary acquisition and pragmatic capacities in oral and written communication within the context of a modern company. Contents are taken from genuine business and accounting sources.

The program is designed around three core aspects:

- Satisfaction of an urgent labor market need that cannot be covered by students of Customs Operations Management.

- Inclusion of new topics such as: microeconomics, project planning and evaluation, SME´s, money laundering, national and international customs regulations, and management of inventory, projects and operations.

- 200 hours of business simulation, encouraging the operationalization of the concepts learned through the classroom content.

GENERAL GUIDELINES FOR TEACHERS

This study program reflects an intention to provide added value to the student's life, with a programmatic structure that explains in detail the content to be delivered in every subject and study unit down. This enables the teacher to lead the knowledge building process in the classroom and in the learning environment. Hence, teachers are able to expound on contents other than the ones exposed here but must not replace them in order to secure equal opportunities in all schools.

The learning outcomes included in the program are general enough for teachers to design their own outcomes in accordance with the ones established in the programs. In this way, learning outcomes must reflect behavioral changes that the student is expected to achieve in the short term, on a daily or weekly basis, in knowledge levels, values, attitudes, capabilities and skills.

The learning and teaching strategies established in this program allow the teacher to use his or her creativity and experience toward the achievement of desired learning outcomes. The teaching and learning strategies will serve as starting points for other considerations that the students must be allowed to construct their own learning experiences. Cognitive strategies must be employed to encourage analytical skills such as: comparison, classification, organization, interpretation, application, experimentation, analysis, identification, discussion, synthesis, evaluation, problem solving, among others.

Assessment rubrics are included and indicate the key outcomes that students must achieve in each unit.

The performance criteria refer to evidence that can be explicitly evaluated; these are observable and measurable products expected from the student. The measurement of these criteria allows the teacher to provide personal follow-up with each student during the learning process. The criteria are the competencies that will be assessed with both theoretical and practical instruments at the end of each unit.

At the beginning of the academic period, each unit of study is assigned an estimated time for its delivery. This time is estimated and flexible; the teacher may choose judicially to expand or reduce the number of hours employed, justifying such changes and without detriment to the adequate development of the topics.

Values and attitudes assigned to each unit should be discussed at the beginning of each class day and serve as the basis of learning experiences subsequently developed, such as cases studies, projects, etc.

According to the educational model based on competency standards, the goal of the teaching-learning process is to develop abilities and skills, as well as, provoke changes in attitudes and aptitudes of students. To achieve this, the following stages in the teaching-learning process should be considered: [1]

- Detect and confirm student learning needs (diagnostic).
- Determine learning outcomes and assessment criteria
- Plan teaching-learning strategies based on student profiles and program contents
- Design and apply corresponding assessment instruments.
- Implement the pedagogical mediation process.
- Evaluate and provide feedback to students (formative and summative assessment).

A learning-teaching strategy is a resource, a means, or an instrument by which the teacher may achieve learning outcomes and apply methodologies. Seen as a resource, the strategy implies a series of elements (material, technical, and human) that allow the articulation of content and promote its acquisition by students.

Seen as a means to an end, the strategy represents the link between what is to be taught by the teacher (content) and what is to be learned by the student (outcome). The strategy allows teachers to measure outcomes. Strategy is a consequence of the application of methodology, so it is of primary importance to define methodologies before strategies. Strategies are, in turn, complementary to each other, thus the importance of ensuring the congruence of each strategy with the methodology.

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[1] Ávila, Gerardo y López, Xinia. Educación basada en normas of competencia. SINETEC. 2000.

The competency standard model redefines basic concepts of education, and these concepts must be redefined in light of this new methodological framework:

Teaching must start with the creation of a learning environment that:

- recognizes previous student knowledge
- is based on cognitive and metacognitive strategies
- promotes resolution of complete and complex tasks.

Learning is based on:

- the gradual construction of knowledge
- the relation of previous knowledge with new information
- organization of knowledge in ways that are significant for the student.
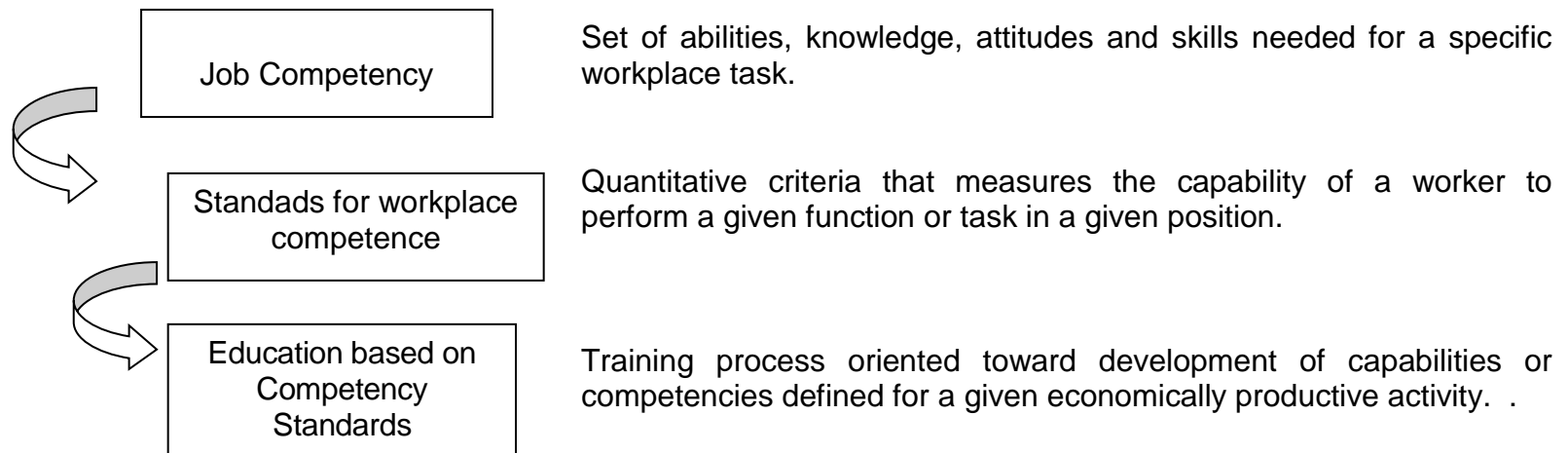
Following are general recommendations for the successful implementation of the specialization:

- The high school that delivers this specialization must have adequate equipment, infrastructure and materials.
- Teachers assigned to this specialization must be trained and interested in further training, to ensure performance.
- In order to correctly develop each study unit, the teacher should employ both inductive and deductive processes, with didactic techniques and interesting activities such as informal discussion, individual and group work, and planned research, so that the student learns to appreciate the value of established objectives.

- Motivate students to subscribe to magazines, bulletins, etc.; guide students towards an effective supplementary bibliography.
- Internships are fundamental elements in the eleventh and twelfth grades for the completion of the teaching - learning process, and as such should be planned in accordance with program contents and when the teacher deems necessary to foster links with the labor market and local companies.
- Field trips and didactic visits are necessary for tenth grade students, according to scheduled learning outcomes and teacher plans.
- The teacher must always promote efficient use of laboratory and other tools, as well as correct work habit in the lab, workshop and classroom.
- Technical bibliography based on each subject area, at each grade level.
- The teacher must always promote the use of problem solving tools, in order to educate creative and critical students, young people that are able to offer their own solutions and alternatives.
- Time must be balanced between theory and practice, according to relevant learning outcomes.
- Adequate workshops or labs for the specialization.
- A computer lab with software and hardware suited to current conditions in the labor market.
- Use of manuals, catalogues, and technical English bibliographic material, as a source of information, Interpretation and translation.
- It is imperative to use the latest technology, such as audiovisual equipment, services and Internet material.
- This specialization is intended to stimulate creativity through the implementation of specific projects related to program contents.
- The teacher must ensure that equipment and tools receive proper maintenance, in coordination with the appropriate authorities.

CONCEPT OF EDUCATION BASED ON COMPETENCY STANDARDS

Competency-standards based education promotes the integral and harmonic development of the individual and trains the student in each of the competencies required in a given productive activity.   In this manner, student needs are met on one end of the process, and the needs of the productive sectors are met on the other.
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| Job Competency | Set of abilities, knowledge, attitudes and skills needed for a specific workplace task. |

| Standads for workplace competence | Quantitative criteria that measures the capability of a worker to perform a given function or task in a given position. |

| Education based on Competency Standards | Training process oriented toward development of capabilities or competencies defined for a given economically productive activity. . |

A competency refers to the capacity to carry out an activity that requires cognitive, motor and social-affective skills; these skills can be classified as personal, social or professional.

From the perspective of competency standards based education, workplace training must prepare the individual to perform in optimum fashion and permit the transfer of competencies to different contexts and situations.

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**Comparison between Technical Traditional Educations
And Competency Based Education** [1]

Traditional Technical Education	Education based on Competency Standards
Traditional learning model oriented toward the needs of highly specialized productive processes	Easily adaptable to varying forms of production, including those using traditional model.
Highly academic program contents. Linked with needs of productive sector, it is not systematic or structured	The productive sector defines expected results from training, which are defined as standards of work competence.
Inflexible programs and courses	Programs and courses based on standards, permitting gradual progress of students as they move to higher levels of competence.

Source: Morfín, Antonio. *La nueva modalidad educativa: Educación basada por normas de competencia.*

ASSESSMENT GUIDELINES

In the context of education in general, and specifically competency standards based education, assessment is a continuous and permanent process, an integral part of teaching-learning. As such, the following aspects should be considered:[2]

Performance assessment is a process in which evidence is compiled and criteria applied to student progress toward achievement of performance criteria previously established for a given standard or workplace competency. Performance assessment allows for the determination of completion of the standard or competency.

In the context of competency standards based education, assessment is a function of learning outcomes, and as such the assessment of a competency focuses on performance. Towards this end, teachers must gather all available evidence to determine if the student has achieved the learning objectives.

From this perspective, we can conclude that assessment is essentially the central factor of competency standards based education, in which weakness and strengths of the student are identified, as are the weaknesses and strengths of the teaching process itself, including strategies, materials, resources, contextualization, etc.

A competency is not observable in and of itself; therefore, it must be inferred from performance. As such, it is crucial to define the type of performance that will generate the evidence required to assess performance. The process of assessment involves observation followed by gathering and Interpretation of evidence that is subsequently contrasted with performance criteria of the corresponding workplace competency technical standard. This process allows the teacher to infer is the student has achieved competence.

Therefore, assessment based on competence standards is carried out in relation to the performance criteria established by the standards, which ,in turn, define the quantity and quality of evidence required to judge the performance of a student. The assessment process consists of the following activities:

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[2] Ávila, Gerardo y López, Xinia. Education basada en normas of competencia. SINETEC. 2000.

Define the requirements or objectives of evaluation:
- Gather evidence
- Compare evidence with requirements
- Make judgment based on this comparison.

This fosters a process of ongoing learning that requires a new model of development and evaluation. We are not interested in proving how much the student has learned (knowing), but rather the performance that the student achieves with what he or she has learned (knowing and doing).

Methodologies recommended for using in education based on standards of competence are the following:
- Observation of performance
- Simulations
- Execution of projects
- Written and oral assessments
- Practical assessments.

As further support of the assessment process, the teacher should use the evidence gathering technique known as "Evidence Portfolio".

In the context of competence standards based educations, this assessment instrument is a folder in which evidence is collected in terms of knowledge, performance and product as this evidence is generated during the learning process. This portfolio allows the student to self-evaluate, and monitoring his or her own progress toward the acquisition of desired competencies.

This technique allows the teacher to gather evidence and compare it with requirements as a function of objectives, and form judgments based on this comparison.

It is the student's responsibility to create and maintain the portfolio, under the teachers' supervision; guidelines for the portfolio are found in Attachment 1 of this document.

TEACHER PLANNING

1.   ANNUAL PLAN FOR SUBJECT- AREA:

Schedule of months and weeks of academic year, broken down into subject areas with corresponding learning outcomes. The following must be considered for the preparation of the annual plan:

- Indicate values and attitudes that will be developed during the plan period.
- Indicate hours that will be assigned to each unit within the subject, and the logical sequence of the units.
- Create the list of materials and/or equipment that the institution must supply for the scheduled activities and deliver this list to school authorities at the beginning of academic year.

Annual Plan Template

Technical High School: _____.

Program:		Subject Area:		Level:
Teacher:				Grade:
Values and attitudes:				

Study Blocks and Learning Outcomes	February	March	April	May	June	July	August	September	October	November	December	Hours
Materials and Equipment needed:												

2. PEDAGOGICAL PRACTICE PLAN FOR THE EDUCATIONAL SUBJECT AREA:

This plan must be completed for each unit. It is a daily tool and must be delivered to school authorities to ensure that the course follows the annual plan.

Pedagogical Practice Plan

High School:			
Sector: Commercial and Services/Industrial	Program:		
Subject Area:		Grade:	Level:
Study Block:		Time:	
Purpose:			

Learning Outcomes	Contents	Teaching-Learning Strategies	Values and attitudes	Performance Criteria	Time

The learning outcomes must be planned according to the annual plan, and must reflect horizontal concordance with the contents, teaching-learning strategies, and performance criteria.

Teaching strategies must be included, specifying methodologies and techniques to be employed, as well as practices to be carried out in line with learning strategies (broken down by student).

In addition to values and attitudes (minimum one per unit), actions that will be taken to strengthen these should be indicated in the teaching-learning strategies column.

Performance criteria will be established based on sufficient evidence defined in the study program.

TECHNICAL PROFESSIONAL PROFILE IN LOGISTICS ADMINISTRATION AND DISTRIBUTION

The Technician in Logistics Administration and Distribution:

- Interprets technical information related to the specialization.
- Clearly transmits technical instructions, using standardized graphical communication.
- Demonstrates ability and skill in the tasks related to the Study Program.
- Directs production processes, complying with instructions from technical superiors.
- Proposes solutions to production process problems.
- Elaborates and evaluate specialization projects.
- Demonstrates quality in your work.
- Uses the computer as a tool for specialization tasks.
- Applies standards of occupational health.
- Applies acquired knowledge in specialization tasks.
- Demonstrates professional ethics in specialization tasks.
- Organizes the workshop following technical standards of the specialization.
- Protects the environment, eliminating pollution sources within customs processes.
- Rationally, uses the materials, equipment, machinery and tools needed in the specialization.
- Uses appropriate technology in the Study Program to contribute to competitiveness, quality and development of the commercial and service sectors.

TECHNICAL OCCUPATIONAL PROFILE

PROGRAM IN LOGISTICS ADMINISTRATION AND DISTRIBUTION

- Recognizes the evolution of commerce in Costa Rica.
- Carries out research to strengthen the development, production and availability of services.
- Carries out purchases and select the ideal supplier.
- Carries out international payment transactions.
- Uses various distinct customs systems.
- Defines basic concepts related to measurements, imports and exports.
- Generically, classifies products, following current tariff regulations.
- Uses necessary and valid procedures to carry out import and export transactions.
- Uses current applications software.
- Resolves product valuation situations, following current customs regulations.
- Uses application software tools in his or her work.
- Develops an anti-money laundering culture.
- Uses operations administration and project management as management decision making.
- Identifies business strategies in global contexts.
- Designs statistical charts and graphs and interpret information for decision making purposes
- Carries out business forecasts for decision making purposes.
- Recognizes the implications of quality for a company.
- Applies project management techniques.
- Uses the correct procedures for adequate inventory planning.
- Carries out short term planning.
- Coordinates statistical control in business processes.
- Plans production capacity in companies.
- Designs work in a manufacturing plant.
- Carries out measurements of plant work.

- Recognizes the principles of business administration.
- Applies techniques of occupational health in the development of his/her profession.
- Uses operational productivity techniques within the company.
- Develops strategies for physical plant distribution.
- Correctly, classifies products for customs purposes.
- Distinguishes among the types of transportation and insurance.
- Creates his/her own physical and virtual company.
- Designs goods and services that are subsequently stored correctly in warehouses.
- Efficiently, manages warehouses in any type of company.

GENERAL OBJECTIVES

LOGISTICS ADMINISTRATION AND DISTRIBUTION PROGRAM

- Contribute to the implementation of tasks related to the specialization, following professional standards and oriented toward efficacy, quality and competitive capacity.
- Efficiently contribute to the economic and social development of the country through correct decision-making in the public or private work place, in the context of global business.
- Strengthen social harmony through the promotion of the highest human values.
- Contribute to better performance using technologies such as computers, adding machines, calculators, and the Internet.
- Promote adequate techniques in business administration, taking into account current law.
- Facilitate the use of basic computer tools, such as word processors, electronic spreadsheets, graphic presentations, and customs applications.
- Contribute personal, economic and social development, respecting standards of occupational health and environmental regulations that ensure the sustainability of the planet.
- Foster respect about ethical standards to facilitate the active participation of the graduated technician in the workforce, as a professional in LOGISTICS ADMINISTRATION AND DISTRIBUTION, with the training necessary to contribute to social harmony.
- Carry out processes according to scheduled times, using the tools of time management.
- Implement Operations Administration processes in public and private companies.

CURRICULAR STRUCTURE
LOGISTICS ADMINISTRATION AND DISTRIBUTION PROGRAM

SUBJECT-AREA	HOURS PER LEVEL		
	X	XI	XII
Compras	8	-	-
Imports and Exports	8	-	4
Logistics	4	8	8
Inventory Management	-	8	-
Operaciones de Manufactura	-	4	-
Manufacturing Operations	-	-	8
English for Communication	4	4	4
TOTAL	**24**	**24**	**24**

NOTE: Technical-area classes last 60 minutes.

LOGISTICS ADMINISTRATION AND DISTRIBUTION
CURRICULAR FRAMEWORK

UNIDADES DE ESTUDIO POR NIVEL						
SUB-ÁREA	**Décimo**	**horas**	**Undécimo**	**horas**	**Duodécimo**	**horas**
Compras **8 horas por semana**	Comercio en Costa Rica.	24				
	Investigación y Desarrollo.	56				
	Compras y proveedores.	128				
	Medio de Pago Internacional.	56				
	Regímenes Aduaneros.	56				
	Total	320				

STUDY BLOCK PER LEVEL						
SUBJECT AREA	Tenth	hours	Eleventh	hours	Twelfth	hours
Import and Export 8 hours per week	*"Merceología"* (The Study of Products and Merchandise) Customs Classification. Import / Export Processes in CR. Application Software. Product Valuation**.** **Total**	24 120 72 48 56 320			Customs Classification. International Transportation and Insurance. **Total**	60 40 100
Logistics 4 hours per week	Information and Communication Technologies (ICT´s). Prevention of Money Laundering. **Total**	128 32 160	Operations Administration. Project Management. Operation Strategies**.** Descriptive Statistics Forecasting. **Total**	80 96 32 40 72 320	Occupational Health. Operations and Productivity. Plant Strategies. **Total**	48 48 104 200

STUDY BLOCK PER LEVEL						
SUBJECT AREA	**Tenth**	**hours**	**Eleventh**	**hours**	**Twelfth**	**hours**
Inventory Management 8 hours per week			Economics.	40		
			Inventory Management.	72		
			Inventory Planning.	72		
			Short-term Scheduling.	72		
			Statistical Control. **Total**	64 320		
Operaciones de Manufactura 4 horas por semana			Gestión Empresarial (CODE)	80		
			Planeación de la capacidad.	32		
			Diseño del trabajo.	24		
			Mediciones de trabajo **Total**	24 160		

STUDY BLOCK PER LEVEL						
SUBJECT AREA	Tenth	hours	Eleventh	hours	Twelfth	hours
Manufacturing Operations 8 hours per week					Business Skills Educational Unit.	80
					Design of Goods and Services.	56
					Warehouse Management.	64
					Total	200

ENGLISH FOR COMMUNICATION
CURRICULAR FRAMEWORK

SUBJECT-AREA	UNITS IN EACH LEVEL					
	TENTH	**HOURS**	**ELEVENTH**	**HOURS**	**TWELFTH**	**HOURS**
English for Communication 4 hours per week	Building personal interaction at the company.	20	Safe work. Introductions in business activities.	20 20	Day to day. Customer service. Stand up for Excellence.	20 20 20
	Daily life activities.	20	Complaints and solving problems.	20	Travel.	20
	Working conditions and success at work.	20	Regulations, rules and advice.	20	Astounding Future Career.	20
	Describing a company, equipment and tools.	20	Following instructions from manuals and catalogues.	40	**Total**	100
	Talking about plans, personal and educational goals.	20	Making telephone arrangements.	20		
	Communicating effectively and giving presentations.	20	Entertaining. **Total**	20 160		
	Achieving Economic Success. **Total**	40 160				

CURRICULAR MAP
LOGISTICS ADMINISTRATION AND DISTRIBUTION TENTH GRADE

SUB - AREA	UNIDAD DE ESTUDIO	RESULTADO DE APRENDIZAJE
Compras (en español) 8 horas por semana (320 horas)	**Comercio en Costa Rica. (24 horas)**	Explicar la evolución del comercio en Costa Rica.
		Explicar la importancia de los tratados de libre comercio y acuerdos para el desarrollo económico comercial de Costa Rica.
	Investigación y Desarrollo. (56 horas)	Demostrar la importancia de un programa de desarrollo de nuevos proveedores en las empresas.
		Ejemplificar el proceso de investigación y desarrollo de una empresa.
	Compras y proveedores. (128 horas)	Reconocer aspectos globales de la cadena de suministros.
		Determinar las estrategias de la cadena de suministros.
		Administrar la cadena de suministros, según la Administración de Operaciones.
		Explicar cómo seleccionar al mejor vendedor de una lista propuesta.
		Elaborar el presupuesto de materiales, con el fin de tomar decisiones sobre requerimientos de compra.
		Elaborar un cartel de licitación, según la Ley de Contratación Administrativa vigente.

SUB - AREA	UNIDAD DE ESTUDIO	RESULTADO DE APRENDIZAJE
Compras.	**Medios de pago internacional. (56 horas)**	Utilizar los medios de pago internacional, empleados en el comercio exterior.
	Regímenes Aduaneros (56 horas)	Resolver situaciones relativas a los regímenes aduaneros, según la normativa vigente.
Imports and Exports. 8 hours per week (320 hours)	*Merceología* (The Study of Products and Merchandise) (24 hours)	Recognize basic concepts of import and export. Explain the Harmonized System.
	Classification Customs. (120 hours)	Explain the use of pre-classification customs. Classify products using the six digit.
	Import and Export Processes in Costa Rica. (72 hours)	Explain import / export procedures. Use customs procedures manuals according to current law. Calculate various types of customs tariffs according to current regulations.

SUBJECT- AREA	STUDY BLOCK	LEARNING OUTCOME
Imports and Exports.	**Import and Export Processes in Costa Rica.**	Elaborate customs declarations, according to current customs legislation. Recognize articles from the *Ley General de Aduanas* (General Customs Law) and its current regulations. Resolve situations related to local transactions, according to current customs regulations.
	Application Software. (48 hours)	Use specific software for various customs transactions.
	Product Valuation. (56 hours)	Apply product valuation rules according to current customs legislation.
Logistics. 4 hours per week (160 hours)	**Information and Communication Technologies (ICTs).** **(128 hours)**	Apply basic word processing functions in the creation of commercial documents. Apply spread sheet tools to create documents. Elaborate presentations and organizational charts using the adequate tools. Apply publishing program tools in the elaboration of informative materials

SUBJECT- AREA	STUDY BLOCK	LEARNING OUTCOME
Logistics.	Information and Communication Technologies (ICTs).	Select Access tools for database management. Use Internet-related applications to search for and access information. Identify computer virus problems and how to prevent them. Apply e-commerce concepts to customs transactions.
	Prevention of money laundering (32 hours).	Recognize the importance of the role of central government in the prevention of money laundering. Apply Law 8204 in the resolution of money laundering situations.

ENGLISH FOR COMMUNICATION
TENTH LEVEL

SUBJECT- AREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for Communication.

160 Hours | Building personal interaction at the company.

20 hours | Cognitive Target: 1

Exchanging information about: Personal interaction at the company, ways of interacting, meeting people, ethics, personal skills, cultural aspects | • Understanding simple familiar phrases and short statements.
• Asking and responding to questions in clearly defined situations.
• Reading personal information forms.
• Reading a personal letter.
• Writing about occupations and writing names and address on an envelope. |
| | Daily life activities.
20 hours | Cognitive Target: 2

Interprets and communicates information about: daily activities at home, school and job. Daily routines | • Making appointments for personal business.
• Describing personal schedules.
• Talking about daily routines at home, at school and at work.
• Predicting the content of a story from the title.
• Writing about daily routines. |

CURRICULAR MAP
ENGLISH FOR COMMUNICATION
TENTH LEVEL

SUBJECT- AREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for Communication.	**Working conditions and success at work.** **20 hours**	Cognitive Target: 3 Interprets and communicates information about: someone´s job, working tasks, job positions, and responsibilities.	• Asking and answering questions about job positions and responding to job interview questions. • Describing someone´s job and uncompleted work tasks. • Reading and interpreting a job application and reading magazine article. • Writing a paragraph describing a job I would like to have. • Filling out a job application.
	Describing company furniture, equipment and tools. **20 hours**	Cognitive Target: 4 Interprets and communicates information about: company furniture, equipment and tools.	• Asking for and giving information on companies and products, furniture. • Communicating messages with little or no difficulty about equipment and tools. • Reading and interpreting companies' descriptions. • Writing lists of equipment and tools from different companies.

CURRICULAR MAP
ENGLISH FOR COMMUNICATION
TENTH LEVEL

SUBJECT- AREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for Communication.	**Talking about plans, personal and educational goals.** **20 hours**	Cognitive Target: 5 Exchanging information about: leisure activities, holidays and special occasions. Planning educational and personal goals.	• Talking about holiday celebrations, and leisure activities. • Describing the steps needed to fill out different types of forms for applying to college. • Reading news and articles about people´s plans. • Describing possible weekend activities.
	Communicating effectively and giving presentations. **20 hours**	Cognitive Target: 6 Interprets and communicates information about: daily activities at home, school and job. Daily routines.	• Solving problems by phone and making telephone arrangements. • Describing what makes a good communicator. • Evaluating the effects of stress factors and gets advice on presenting. • Describing the facts that affect the success of a presentation.

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**CURRICULAR MAP
ENGLISH FOR COMMUNICATION
TENTH LEVEL**

SUBJECT AREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for Communication.	**Achieving economic success.** **40 hours**	Cognitive Target: 7 Using appropriate language for comparing goods, discussing advertisements, describing products and your preferences.	• Discussing about advertisements from different means of communication. • Comparing goods and services and explaining the reasons why I like a product. • Describing product characteristics by contrasting and comparing different goods or services. • Expanding reading skills by reading job ads from newspapers or magazines and reading formal letters of complaint. • Writing a formal letter of complaint, completing a product comparison chart and writing an advertisement.

CURRICULUM MAP
LOGISTICS ADMINISTRATION AND DISTRIBUTION ELEVENTH GRADE

SUBJECT- AREA	STUDY BLOCK	LEARNING OUTCOME
Logistics. **8 hours per weeks** **(320 hours)**	**Operations Administration.** **(80 hours)**	Explain the functions of administrative process as a key element of the modern organization. Explain Total Quality within the framework of Operations Administration. Develop tools needed to generate business ideas. Recognize the importance of the inspection function in modern administration. Apply standards of professional etiquette and protocol, according to international standards. Evaluate professional ethics in customs-related work.
	Project Management **(96 hours)**	Explain the stages of a business project. Recognize project management techniques. Carry out the scheduling of an administrative project.

SUBJECT- AREA	STUDY BLOCK	LEARNING OUTCOME
Logistics.	Project Management. (96 hours)	Determine activity times in the management of a project.
		Use MS Project as a tool for business project management.
	Operations Strategy in a Global Setting. (32 hours)	Use operations strategies in a global setting.
	Descriptive Statistics (40 hours)	Determine role of statistics in the financial arena.
		Explain the stages of statistical research.
		Create frequency distributions with graphics.
		Calculate measures of central tendency for grouped and non-grouped data.
		Elaborate statistical charts and graphs to present data from your professional field.
	Forecasting. (72 hours)	Recognize the strategic importance of business forecasting.
		Develop various approaches to business forecasting.

SUBJECT- AREA	STUDY BLOCK	LEARNING OUTCOME
Inventory Management. **8 hours per week** **(320 hours)**	**Economics.** **(40 hours)**	Explain important aspects of micro economics.
		Distinguish relative aspects of supply and demand.
		Recognize concepts related to quality in business administration.
	Inventory Management. **(72 hours)**	Explain the functions of inventory management.
		Develop inventory models, according to Inventory Management principles.
		Explain fixed period systems, according to Inventory Management principles.
	Inventory Planning. **(72 hours)**	Explain aggregate planning.
		Plan materials requirements, taking inventory into account.
		Master the concepts of materials requirement planning (MRP).
	Short-term Scheduling. **(72 hours)**	Comment on general aspects of short term scheduling.
		Design Gantt chart for resource scheduling and time assignments.

SUBJECT- AREA	STUDY BLOCK	LEARNING OUTCOME
Inventory Management.	**Short-term Scheduling.**	Apply the allocation method for short-term scheduling.
		Apply task sequencing in work centers.
		Explain distinct types of short-term schedules.
	Statistical Process Control. (64 hours)	Implement statistical control of a productive process.
Operaciones de manufactura. (en español) 4 horas por semana (160 horas)	**Gestión Empresarial. (CODE) 80 horas**	Aplicar principios de autogestión y toma de decisiones en situaciones empresariales sencillas.
		Diseñar metas empresariales utilizando pautas específicas y asumiendo riesgos.
		Desarrollar competencias para tener una capacidad empresarial.
		Explicar cómo las personas toman la decisión de crear u operar su propia empresa.
		Seleccionar oportunidades de negocios utilizando distintas técnicas.
		Utilizar los procedimientos necesarios para organizar una empresa.
		Operar una empresa desde el punto de vista contable.
		Diseñar planes para iniciar una empresa.
		Implementar un plan de negocios exitoso.

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SUB - AREA	UNIDAD DE ESTUDIO	RESULTADO DE APRENDIZAJE
Operaciones de manufactura.	**Planeación de la capacidad.** **(32 horas)**	Determinar la capacidad diseñada y la capacidad efectiva. Explicar cómo se planea la capacidad de planta. Realizar un análisis de punto de equilibrio, interpretando sus resultados. Calcular el valor presente neto de una inversión.
	Diseño de Trabajo. **(24 horas)**	Establecer la estrategia de recurso humano para la ventaja competitiva. Explicar en qué consiste el diseño del trabajo de planta. Ilustrar los lugares de trabajo visuales dentro de la planta.
	Medición del trabajo. **(24 horas)**	Calcular los estándares de mano de obra y medición del trabajo.

**CURRICULAR MAP
ENGLISH FOR COMMUNICATION
ELEVENTH LEVEL**

SUBJECT AREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for communication. **160 Hours**	**Safe Work.** **20 hours**	Cognitive Target: 1 Exchanging information about: safe and unsafe driving, accidents and job benefits.	• Giving reasons for being late at work, school or meeting. • Identifying different signs and prevention procedures. • Describing consequences of accidents as well as accident prevention procedures at work. • Identifying special clothes and equipment used at work. • Scanning for specific information related to safety at work. • Reading stories about workplace accidents and prevention measures. • Describing the advantages of working in a company.

**CURRICULAR MAP
ENGLISH FOR COMMUNICATION
ELEVENTH LEVEL**

SUBJECT AREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for Communication.	**Regulations, Rules and Advice.**

20 hours | Cognitive Target: 3 Interprets and communicates information about: workplace rules and following them. | • Discussing situations when foreign business people make "cultural mistakes."

• Talking to a Manager about not following rules.

• Comparing company regulations and giving advice.

• Learning about dress code in a given country, and putting it into practice at school or work.

• Writing employee dress-code rules to be applied in a company. |

CURRICULAR MAP
ENGLISH FOR COMMUNICATION
ELEVENTH LEVEL

SUBJECT AREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for Communication	**Complaints and Problem Solving** **20 hours**	Cognitive Target: 4 Exchanging information about: making complaints, apologizing and solving problems.	• Learning how to deal with a complaint by voice mail and automated telephone information. • Apologizing when required. • Solving problems at the office. • Dealing with problems, client complaints and giving apologizes. • Understanding how to use items in a first-aid kit. • Writing about solutions to a problem at work or school.

CURRICULAR MAP
ENGLISH FOR COMMUNICATION
ELEVENTH LEVEL

SUBJECT AREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for Communication	**Following Instructions from Manuals and Catalogues** **40 hours**	Cognitive Target: 5 Interprets and communicates information about: technical vocabulary related to manuals and catalogues instructions.	• Understanding or using appropriate language for informational purposes. • Comparing equipment used in a job taken from different catalogues. • Identifying different equipment and components in catalogues used in a specific field of study. • Interpreting written instructions from a technical manual in a specific field of study.

CURRICULAR MAP
ENGLISH FOR COMMUNICATION
ELEVENTH LEVEL

SUBJECT AREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for Communication	**Making Telephone Arrangements** **20 hours**	Cognitive Target: 6 Exchanging information about: telephone calls and arrangements.	• Exchanging information in telephone conversations. • Fluently expressing messages. • Making an appointment by telephone. • Comparing the ways people communicate in different cultures, such as expressions or gestures that people from other cultures might not understand. • Writing a paragraph about how culture affects business life.

CURRICULAR MAP
ENGLISH FOR COMMUNICATION
ELEVENTH LEVEL

SUBJECT AREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for Communication	**Entertainment** **20 hours**	Cognitive Target: 7 Demonstrate ability to work cooperatively with others.	• Entertaining guests and promoting leisure activities. • Listening to information about TV schedule. • Discussing corporate entertaining. • Reading a journal about a trip. • Organizing a conference at another country including a variety of aspects.

CURRICULUM MAP
LOGISTICS ADMINISTRATION AND DISTRIBUTION TWELFTH GRADE

SUBJECT- AREA	STUDY BLOCK	LEARNING OUTCOME
Imports and Exports **4 hours per week** **(100 hours)**	**Customs Classification (60 hours)**	Classify goods according to the six-digit customs classification.
	International Transportation and Insurance (40 hours)	Explain generalities of international transportation and insurance.
		Distinguish different types of vessels, the services they offer and the goods they carry.
		Plan materials handling and packaging according to international standards.
		Organize routes for efficient transportation of goods using cardinal compass points.
		Calculate ocean freight charges and customs fees, according to current legislation.

SUBJECT- AREA	STUDY BLOCK	LEARNING OUTCOME
Logistics **8 hours per week** **(200 hours)**	**Occupational health** **(48 hours)**	Apply standards of safety and hygiene for protection of the environment and public health. Determine the importance of demarcation of danger zones and access ways. Distinguish the types of agent and substances to which workers are exposed at workplace. Apply rules and regulations related to occupational health.
	Operations and Productivity **(48 hours)**	Define administration of operations. Explain operations in the service sector. Recognize new tendencies in administration of operations. Calculates measurements of productivity operations.

SUBJECT- AREA	STUDY BLOCK	LEARNING OUTCOME
Logistics	Plant Strategies (104 hours)	Design strategies based on process approaches.
		Explain Computer Integrated Manufacturing (CIM).
		Develop plant localization strategies.
		Design strategies for physical distribution of manufacturing plants.
		Determine work times in a manufacturing plant.
Manufacturing Operations 8 hours per week (200 hours)	Business Skill Educational Unit (80 hours)	Identify elements of the practice company.
		Elaborate products at different levels of the practice company.
	Design of Goods and Services (56 hours)	Select designed goods and services adequately.
		Manufacture newly designed products.
		Define a product from the design perspective.
		Identify documents needed for the production and design of services.

Manufacturing Operations.	**Warehouse Management. (64 hours)**	Analyze basic tools and procedures used for warehouse management and administration. Explain theoretical fundamentals of inventory management and its importance in the context of business administration

CURRICULAR MAP
ENGLISH FOR COMMUNICATION
TWELFTH LEVEL

SUBJECT AREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for Communication. **100 Hours**	**Daily Work.** **20 hours**	Cognitive Target: 1 Exchanging information about: day to day work.	• Asking and giving information about working routines. • Describing times and conditions of my job and daily routines. • Expressing likes and dislikes in my daily life. • Reading an advertisement about a new product. • Writing a plan to improve safety in your home.

CURRICULAR MAP
ENGLISH FOR COMMUNICATION
TWELFTH LEVEL

SUBJECT	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for Communication.	**Customer Service** **20 hours**	Cognitive Target: 2 Interprets and communicates information about: customer service.	• Understanding specifications about the elements of effective telephone communications. • Applying techniques to improve effectiveness as a listener. • Defining the importance of proper telephone techniques in providing excellent service to customers • Understanding details from texts, passages and others. • Stating the importance of attitude and creativity in providing high quality customer service.

CURRICULAR MAP
ENGLISH FOR COMMUNICATION
TWELFTH LEVEL

SUBJECT AREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for Communication.	**Stand up for Excellence.** **20 hours**	Cognitive Target: 3 Exchanging information about: The ability to work cooperatively with others as a member of a team.	•Listening to a conversation between an employer and an employee and between coworkers. •Expressing encouragement when talking about programs and courses. •Reading about and discussing job skills. •Organizing information regarding options between job benefits and personal qualities

CURRICULAR MAP
ENGLISH FOR COMMUNICATION
TWELFTH LEVEL

SUBJECT AREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for Communication.	**Travel.** **20 hours**	Cognitive Target: 4 Interprets and communicates information about travelling.	• Listening to statements about a map in order to get to a specific place. • Explaining leisure and entertainment possibilities to a visitor. • Discussing weather concerns when travelling. • Reading maps from other countries to find out about cities and places. • Reading about environmental issues in a foreign country. • Revising a business plan to propose to an international company. • Developing writing skills, making, accepting or declining an offer.

CURRICULAR MAP
ENGLISH FOR COMMUNICATION
TWELFTH LEVEL

SUBJECT AREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for Communication.	**Astounding Future Career.** **20 hours**	Cognitive Target: 5 Interprets and communicates information about: applying or transferring skills learned in one job situation to another.	• Listening to a discussion between two managers. • Discussing community problems and solutions by interviewing classmates. • Talking about life in a city and contrasting it with life in the country. • Comparing and contrasting the lives and goals of people regarding working conditions. • Developing consciousness about skills, achievements and awards. • Organizing ideas to design a plan for a life change.

PROGRAM CONTENT

TWELFTH GRADE

IMPORTS AND EXPORTS

DISTRIBUTION OF STUDY BLOCKS
Imports and Exports

Study Blocks	Name	Time in Hours	Weeks per Study Blocks
I	Customs Classification.	60	15
II	International Transport and Insurance.	40	10
	TOTAL	**100**	**25**

IMPORTS AND EXPORTS

DESCRIPTION:

The **Import and Export** subject, at 4 hours per week, consists of two study blocks:

Customs Classification: students will learn how to assign correct tariff classifications to goods subject to export processes.

International Transport and Insurance: students will distinguish among the types of international transport and insurance applicable to customs processes.

GENERAL OBJECTIVES:

1. Correct tariff classification of goods.
2. Distinguish among the types of transport and insurance.

EDUCATIONAL INSTITUTION TECHNICAL STANDARD

GENERAL DATA:

Title: Customs Classification.
Purpose: Generically, classify goods, according to the current customs system.
Competency level: Basic

UNITS OF JOB THAT COMPRISE THE STANDARDS

Title	Classification
• Correctly, explains customs classifications.	Specific
• Precisely, classifies goods according to the current customs system.	Specific
• Competently, explains notes, technical section notes, supplementary notes, administrative circulars, applicable explanatory memoranda related to customs classification.	

Elements of Competence

Reference	Title of Element
1 – 1	Generically classify goods according to current customs system.

Performance Criteria:

1. Classifies goods according to the six digit customs classifications.

Field of Application:

Category	Class
Services	Technical Education Teaching Services

Performance Evidence:

- Recognizes customs classification.
- Classifies goods according to the customs classification.
- Explains notes, technical section notes, supplementary notes, administrative circulars, and current memoranda related to customs classification.

Sector: Commerce and Services	Program: Logistics Administration and Distribution
Subject-Area: Imports and Exports	Grade: Twelfth
Study Block: Tariff Classification	Time: 60 hours
Purpose: Generically classify goods according to current customs classification system	

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
1. Classify goods according to the six-digit customs classification	**Section XII:** • Shoes, hats and other headgear, umbrellas, sunshades, walking sticks, whips, riding crops and parts thereof. Feathers and feather products, artificial flowers and hair products	The Teacher: • Explains customs classification. • Resolves classification situations, according to the customs classification. • Recognizes notes, technical section notes, supplementary notes, administrative circulars, and current memoranda related to customs classification.	• Able to analyze conflictive situations	• Classifies goods according to the six-digit customs classification

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	Section XIII: • Articles of stone, plaster, cement, asbestos, mica or similar material, ceramic products, glass and glass products **Section XIII:** • Ceramics. **Section XIV:** • Fine pearls (natural or cultured), precious or semi-precious stones; precious metals, metals clad with precious metals (plate) and articles thereof; costume jewelry; coins.	The Student: • Recognizes the main elements of the customs classification system. • Classifies goods according to the current customs classification system. • Explains notes, technical section notes, supplementary notes, administrative circulars, and current memoranda related to customs classification.		

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	Section XV: • Common metals and products thereof **Section XVI:** • Machinery and mechanical appliances, electrical equipment and parts thereof, sound recorders and reproducers, television image and sound recorders and reproducers, parts and accessories thereof. **Section XVII:** • Transport equipment. **Section XVIII:**			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Optical, photographic, cinematographic, measuring, control, precision instruments and equipment; medical or surgical instruments and equipment; clocks and timepieces; musical instruments, parts and accessories thereof. **Section XIX:** • Firearms, ammunition, parts and accessories thereof. **Section XX:** • Miscellaneous manufactured articles.			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	Section XXI: • Objects of art, collectibles, antiques. Notes, technical section notes, supplementary notes, administrative circulars, and current memoranda related to tariff classification.			

PRACTICES AND CHECKLISTS

PRACTICE DEVELOPMENT

STUDY BLOCK: Customs classification	PRACTICE No. 1

Purpose:

Scenario:	Time:

MATERIALS	MACHINERY	EQUIPMENT	TOOLS

Procedures

The Teacher:

- Explains customs classification.

- Resolves classification situations, following customs classification.

- Recognizes notes, technical section notes, supplementary notes, administrative circulars, and current memoranda related to customs classification.

RECOMMENDED CHECKLISTS	Date:

Student´s Name:	
Instructions: The following criteria will be verified in the performance of each student through observation.	
From the following list, mark with an 'X' in the column that corresponds to the performance of the student.	

DEVELOPMENT	YES	NOT YET	DO NOT APPLY
Correctly, recognize customs classification.			
Correctly, classify goods according to the customs classification			
Competently, explain notes, technical section notes, supplementary notes, administrative circulars, and current memoranda related to customs classification.			

OBSERVATIONS:

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	EVIDENCE	TYPE	SUFFICIENCY OF EVIDENCE
Classify goods according to the six-digit.	Classifies goods according to the six-digit.	Recognizes customs classification	Performance	Correctly, recognizes customs classification.
		Classifies goods according to the customs classification.	Performance	Precisely, classifies goods according to the customs classification
		Explains notes, technical section notes, supplementary notes, administrative circulars, and current memoranda related to customs classification.	Performance	Competently, explains notes, technical section notes, supplementary notes, administrative circulars, and current memoranda related to customs classification.

EDUCATIONAL INSTITUTION TECHNICAL STANDARD

GENERAL DATA:

Title: International Transportation and Insurance.
Purpose: Contract cargo transport suited to the customer's needs and conditions of the product.
Competency level: Basic

UNITS OF JOB THAT COMPRISE THE STANDARDS

Title	Classification
• Correctly, cites the concept, importance, evolution, and terminology related to international transportation and insurance.	Specific
	Specific
• Properly, details the role of ISO in the standardization of containers and how to prevent the transportation of illegal materials.	Specific
	Specific
• Clearly, describes the types of vessels and transportation services available to the market.	Specific
• Correctly, recognizes goods that may be transported in the distinct types of vessels.	Specific
• Clearly, assigns corresponding responsibilities to parties involved in international transportation.	
• Correctly, cites the objectives of materials handling and packaging.	Specific
• Competently, illustrates packaging systems.	Specific
• Competently, plans the handling and packaging of materials.	Specific
• Correctly, identifies freight transport routes.	Specific
• Clearly, recognizes transportation routes.	Specific
• Clearly, explains socioeconomic aspects of the functional regions of C.R.	Specific
• Correctly, describes the elements that influence freight charges.	Specific
• Accurately, calculates ocean freight charges, breakdown of these charges, and fees.	Specific

Elements of Competence

Reference	Title of Element
1 –2	Contract cargo transport suited to the customer's needs and conditions of the product.

Performance Criteria:

1. Explains general issues regarding international transport and insurance.
2. Distinguish different types of vessels, the services they offer and the goods they carry.
3. Plan materials handling and packaging according to international standards.
4. Organizes routes for efficient transportation of goods using the cardinal compass points.
5. Calculates ocean freight charges and fees according to current legislation.

Field of Application:

Category	Class
Services	Technical Education Teaching Services

Knowledge Evidence:

- Cites the concept, importance, evolution, and terminology related to international transportation and insurance.
- Describes the types of vessels and transportation services available to the market.
- Identifies corresponding responsibilities to parties involved in international transportation.
- Cites the objectives of materials handling and packaging.
- Distinguishes freight transport routes.
- Describes the elements that influence freight charges.

Performance Evidence:

- Recognizes the role of ISO in the standardization of containers and how to prevent the transportation of illegal materials.
- Recognizes the goods that can be transported on each type of vessel.
- Illustrates packaging systems.
- Recognizes transport routes.
- Explains socioeconomic aspects of the functional regions of C.R.

Product Evidence:

- Plans the handling and packaging of materials.
- Calculates ocean freight charges, breakdown of these charges, and fees.

Sector: Commerce and Services	Program: Logistics Administration and Distribution
Subject-Area: Imports and Exports	Grade: Twelfth
Study Block: International Transportation and Insurance	Time: 40 hours
Purpose: Contract cargo transport suited to the customer's needs and conditions of the product.	

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
1. Explain generalities of international transportation and insurance.	International Transportation and Insurance: • Concept, importance and evolution • Terminology: cellular ship, container, COFC (container on flat car), containerization, chassis port-to-port/door-to-door, dry trailer, intermodal or multimodal, CAF landed.	The Teacher: • Names the concept, importance, evolution, and terminology related to international transportation and insurance. • Explains the role of ISO in the standardization of containers and how to prevent the transportation of illegal materials.	• Interested in learning about national and international freight transport	• Explains generalities of international transportation and insurance.

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	L+L (less than trailer load), pier to pier, piggy back, reefer, trailer ships, TI (trailer load), unitization. Types of transportation: • Air. • Ocean. • Land. • Multimodal. • ISO and its role in the standardization of containers. • Prevention of the transport of illegal materials with shipments. Insurance: • Risks and coverage. • Export credit insurance.	• Points out corresponding responsibilities of parties involved in international transportation. <u>The Student</u>: • Cites the concept, importance, evolution, and terminology related to international transportation and insurance. • Recognizes the role of ISO in the standardization of containers and how to prevent the transportation of illegal materials. • Identifies corresponding responsibilities of parties involved in international transportation.		

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	Responsibilities of parties involved in international transportation: • Exporter. • Transportation. • Port. • On board. Destination port. • Risks • Payment forms • Customs clearance. Customs broker services.			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
2. Distinguish different types of vessels, the services they offer and the goods they carry.	Types of vessels: • Tankers. • Conventional freight. • Bulk ships. • Lift on / lift off (LO-LO). • Container ship. • Multi-purpose. • Mixed (RO-RO / LO-LO/ RO-LO). Types of transportation services (regular line, affiliated line).	The Teacher: • Distinguishes the types of vessels and transportation services available to the market. • Classifies the goods that can be transported on each type of vessel. The Student: • Describes the types of vessels and transportation services available to the market. • Recognizes the goods that can be transported on each type of vessel.	• Interested in learning about national and international freight transport	• Distinguishes different types of vessels, the services they offer and the goods they carry. .

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
3. Plan materials handling and packaging according to international standards.	Materials handling and packaging: • Concept and objectives. • Choosing the right method. • Containers. • Packaging system.	The Teacher: • Enumerates the objectives of materials handling and packaging. • Gives examples of packaging systems. • Schedules materials handling and packaging. The Student: • Cites the objectives of materials handling and packaging. • Illustrates packaging systems. • Plans the handling and packaging of materials.	• Interested in learning about national and international freight transport	• Plans materials handling and packaging according to international standards.

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
4. Organize routes for efficient transportation of goods, using cardinal compass points.	Best route: • Land. • Ocean. • Air. Transportation routes: • Importance of follow-up. • Compass points. • Costa Rica's borders (natural, conventional, mixed). • Costa Rica and its role as strategic bridge. • Weather factors. • Costa Rica's rivers.	The Teacher: • Identifies freight transport routes. • Explains transportation routes. • Recognizes socioeconomic aspects of the functional regions of C.R. The Student: • Distinguishes freight transport routes. • Recognizes transportation routes. • Explains socioeconomic aspects of the functional regions of C.R.	• Interested in learning about national and international freight transport	• Organizes routes for adequate transportation of goods to be shipped, using the four compass points.

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	Socioeconomic aspects of the functional regions of C.R.: Regions • Central. • West. • Central. • Northwest. • Chorotega. • North. • East. • Brunca. • Transportation Strategies (buy or lease equipment). • Selection of personnel.			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
5. Calculate ocean freight charges and customs fees, according to current legislation.	Ocean freight charges: • Fees. • Surcharges (types and adjustables). • Port surcharges. • Optional surcharges. • Discounts (loyalty). • Discount for palletized shipment. • Special discounts. Factors that influence in shipping costs • Type of fee. • Other costs covered in fees.	The Teacher: • Explains the elements that influence freight charges. • Resolves situations involving shipping fees, breakdown of charges, fee quotes. The Student: • Describes the elements that influence freight charges. • Calculates ocean freight charges, breakdown of these charges, and fees.	• Interested in learning about national and international freight transport	• Calculates ocean freight charges and customs fees, according to current legislation.

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	Offloading - Regular line conditions • Free in and out/ shipper does not pay loading or unloading. • Free in / no loading cost. • Free out / no unloading cost. • Type of unit. • Tonnage. • Commercial value. • Type of loading/unloading. • Hazardous goods.			

PRACTICES AND CHECKLISTS

PRACTICE DEVELOPMENT

STUDY BLOCK: International Transport and Insurance	PRACTICE No. 1

Purpose:

Scenario:	Time:

MATERIALS	MACHINERY	EQUIPMENT	TOOLS

Procedures

The Teacher:

- Names the concept, importance, evolution, and terminology related to international transportation and insurance.
- Explains the role of ISO in the standardization of containers and how to prevent the transportation of illegal materials.
- Points out corresponding responsibilities of parties involved in international transportation.
- Distinguishes the types of vessels and transportation services available to the market.
- Classifies the goods that can be transported on each type of vessel.
- Enumerates the objectives of materials handling and packaging.
- Gives examples of packaging systems.
- Schedules materials handling and packaging.
- Explains the elements that influence freight charges.
- Resolves situations that involve ocean freight charges, breakdown of these charges, and fees.

RECOMMENDED CHECKLISTS	Date:

Student´s Name:	

Instructions: The following criteria will be verified in the performance of each student through observation.

From the following list, mark with an 'X' in the column that corresponds to the performance of the student.

DEVELOPMENT	YES	NOT YET	DO NOT APPLY
Correctly, cite the concept, importance, evolution, and terminology related to international transportation and insurance.			
Properly, details the role of ISO in the standardization of containers and how to prevent the transportation of illegal materials.			
Clearly, describes the types of vessels and transportation services available to the market.			
Correctly, recognizes the goods that can be transported on each type of vessel.			
Clearly, assigns corresponding responsibilities to parties involved in international transportation.			
Correctly, cites the objectives of materials handling and packaging.			
Competently, illustrates packaging systems.			
Competently, plans the handling and packaging of materials.			
Correctly, identifies freight transport routes.			
Clearly, recognizes transportation routes.			

Clearly, explains socioeconomic aspects of the functional regions of C.R.			
Correctly, describes the elements that influence freight charges.			
Accurately calculates ocean freight charges, breakdown of these charges, and fees.			

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	EVIDENCE	TYPE	EVIDENCE SUFFICIENCY
Explain generalities of international transportation and insurance.	Explains generalities of international transportation and insurance.	Cites the concept, importance, evolution, and terminology related to international transportation and insurance.	Knowledge	Correctly, cites the concept, importance, evolution, and terminology related to international transportation and insurance.
		Describes the types of vessels and transportation services available to the market.	Knowledge	Clearly, describes the types of vessels and transportation services available to the market.
		Recognizes the role of ISO in the standardization of containers and how to prevent the transportation of illegal materials.	Performance	Properly, details the role of ISO in the standardization of containers and how to prevent the transportation of illegal materials.
2. Distinguish different types of vessels, the services they offer and the goods they carry.	Distinguishes different types of vessels, the services they offer and the goods they carry.	Identifies corresponding responsibilities of parties involved in international transportation.	Knowledge	Clearly, assigns corresponding responsibilities to parties involved in international transportation.

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	EVIDENCE	TYPE	EVIDENCE SUFFICIENCY
		Correctly recognizes the goods that can be transported on each type of vessel.	Performance	Correctly, recognizes the goods that can be transported on each type of vessel.
Plan materials handling and packaging according to international standards.	Plans materials handling and packaging according to international standards.	Cites the objectives of materials handling and packaging.	Knowledge	Correctly, cites the objectives of materials handling and packaging.
		Illustrates packaging systems.	Performance	Competently, illustrates packaging systems.
		Plans the handling and packaging of materials.	Product	Competently, plans the handling and packaging of materials.
Organize routes for efficient transportation of goods using cardinal compass points.	Organizes routes for efficient transportation of goods using cardinal compass points.	Distinguishes freight transport routes.	Knowledge	Correctly, identifies freight transport routes.
		Recognizes transport routes.	Performance	Clearly, recognizes transport routes.

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	EVIDENCE	TYPE	EVIDENCE SUFFICIENCY
		Explains socioeconomic aspects of the functional regions of C.R.	Performance	Clearly, explains socioeconomic aspects of the functional regions of C.R.
Calculate ocean freight charges and customs fees, according to current legislation.	Calculates ocean freight charges and customs fees, according to current legislation.	Describes the elements that influence freight charges.	Knowledge	Correctly, describes the elements that influence freight charges.
		Calculates ocean freight charges, breakdown of these charges, and fees.	Product	Accurately, calculates ocean freight charges, breakdown of these charges, and fees.

LOGISTICS

DISTRIBUTION OF STUDY BLOCKS

Logistics

Study Blocks	Name	Time in Hours	Weeks per Study Block
I	Occupational Health.	48	6
II	Operational Productivity.	48	6
III	Plant Strategies.	104	13
	TOTAL	200	25

LOGISTICS

DESCRIPTION:

Logistics, at 8 hours per week, consists of three study blocks:

Occupational Health: students will acquire basic principles of occupational health, in order to use them in their work.

Operational Productivity: focus on techniques related to operational productivity

Plant Strategies: recognize strategies for plant design, taking into account basic principles.

GENERAL OBJECTIVES:

- Apply occupational health techniques in your work.
- Use techniques of operational productivity within a company.
- Develop strategies to organize the physical work environment.

EDUCATIONAL INSTITUTION TECHNICAL STANDARD

GENERAL DATA

Title: Occupational Health.
Purpose: Apply fundamental concepts of Occupational Health.
Competency level: Basic

UNITS OF JOB THAT COMPRISE THE STANDARDS

Title	Classification
• Competently, explains security and hygiene rules in order to protect the environment and human health.	Specific
• Adequately, explains the importance of the use of demarcation and symbols in risk areas.	Specific
• Clearly, comments on the concept of order and cleanliness in the work place.	
• Accurately, distinguishes the types of garbage.	Specific
• Correctly, identifies the concept and importance of danger zones and access ways.	
• Adequately, explains the importance of the use of demarcation and symbols in risk areas.	Specific
• Correctly, applies procedures for the demarcation of danger zones and access ways.	Specific
• Clearly, lists the basic concepts related to each agent or substance.	Specific
• Correctly, discusses the importance of control of agents and substances in the prevention of workplace illness.	Specific
• Accurately, comments on the articles selected for each of the documents.	Specific
• Clearly, sustains the importance of Law 6727 in the workplace.	Specific
• Correctly, applies laws and regulations related to occupational health.	Specific

Elements of Competence

Reference	Title of Element
2 - 1	Implement occupational health program, following current regulations

Performance Criteria:

1. Applies standards of safety and hygiene for protection of the environment and public health.
2. Evaluates the importance of demarcation of danger zones and access ways.
3. Distinguishes the types of agent and substances to which workers are exposed at workplace.
4. Applies rules and regulations related to occupational health.

Field of Application:

Category	Class
Services	Technical Education Teaching Services

Knowledge Evidence:

- Lists the basic concepts related to each agent or substance.
- Mentions the importance of control of agents and substances in the prevention of workplace illness.
- Comments on the articles selected for each of the documents.
- Comments on the concept of order and cleanliness in the work place.

- Distinguishes the types of garbage.
- Identifies the concept and importance of danger zones and access ways.

Performance Evidence:

- Explains security and hygiene rules in order to protect the environment and human health.
- Explains the importance of the use of demarcation and symbols in risk areas.
- Explains the importance of Law 6727 in the workplace.

Product Evidence:

- Applies procedures for the demarcation of danger zones and access ways.
- Applies laws and regulations related to occupational health.

Sector: Industrial	Program: Logistics Administration and Distribution
Subject-Area: Logistics	Grade: Twelfth
Study Block: Occupational Health	Time: 48 hours
Purpose: Apply fundamental concepts of Occupational Health.	

LEARNING OUTCOMES	CONTENTS	TEACHING - LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
1. Apply standards of safety and hygiene for protection of the environment and public health.	Prevention of accidents through order and cleanliness: • Waste. • Concept. • Types. • Computer waste • Elimination and handling. • Garbage. • Concept. • Types. • Classification • Elimination and handling. • Personal protection equipment (for all parts of the body)	The Teacher: • Relates the concepts of order and cleanliness to the workplace. • Illustrates the types of garbage. • Applies security and hygiene rules in order to protect the environment and human health. The Student: • Comments on the concept of order and cleanliness in the work place.	• Consciousness of the consequences of everything that we do or don't do.	• Applies standards of safety and hygiene for protection of the environment and public health.

LEARNING OUTCOMES	CONTENTS	TEACHING - LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
2. Evaluate the importance of demarcation of danger zones and access ways.	Demarcation of danger zones and access ways: • Symbols and signs of danger. • Demarcation of machines, danger zones and security paths. • Standardization of colors. • Importance of colors for safety. • Colors used: red, orange, blue, violet, white, black or gray	• Distinguishes the types of garbage. • Explains security and hygiene rules in order to protect the environment and human health. The Teacher: • Defines the concept and importance of danger zones and access ways. • Values the importance of demarcation of danger zones and access ways. • Evaluates danger zones and access ways in the workplace. The Student: • Identifies the concept and importance of danger zones and access ways.	• Consciousness of the consequences of everything we do or don't do.	• Evaluate the importance of demarcation of danger zones and access ways.

LEARNING OUTCOMES	CONTENTS	TEACHING - LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
		• Explains the importance of the use of demarcation and symbols in risk areas. • Applies procedures for the demarcation of danger zones and access ways.		
3. Distinguish the types of agent and substances to which workers are exposed the at workplace.	Concept of agent/substance • Types of agents. • Physical. • Chemical. • Biological. • Ergonomics. • Exposures. • Time. • Intensity. • Ventilation. • Concept. • Importance. • Ventilation: local and general. • Illumination. • Concept. • Importance.		• Responsibility: consciousness of the consequences of everything that we do or don't do.	• Distinguishes the types of agent and substances to which workers are exposed at the workplace.

•	Main variables.			

LEARNING OUTCOMES	CONTENTS	TEACHING - LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
4. Apply rules and regulations related to occupational health.	• Size of object. • Brilliance and contrast. • Visual acuity • Noise • Hearing mechanics • Properties of sound • Physiological effect of noise Noise control methods Law 6727 on workplace risks: • Workers' rights • Workers obligations • Employer obligations. • General regulations governing occupational safety.	• Mentions the importance of control of agents and substances in the prevention of workplace illness. The Teacher: • Discusses the articles selected for each of the documents. • Explains the importance of Law 6727 in the workplace. • Analyzes situations and apply laws and regulations related to occupational health.	• Interest in workers' rights.	• Applies rules and regulations related to occupational health.

LEARNING OUTCOMES	CONTENTS	TEACHING - LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Regulations of "*Comisiones de Salud Ocupacional*" (Occupational Health Commitees). • Workplace risk model from the national insurance institute. • Occupational health program.	The Student: • Comments on the articles selected for each of the documents. • Explains the importance of Law 6727 in the workplace. • Applies laws and regulations related to occupational health.		

Dirección de Educación Técnica
y Capacidades Emprendedoras

PRACTICES AND CHECKLISTS

PRACTICE DEVELOPMENT

STUDY BLOCK: Occupational Health	PRACTICE No. 1

Purpose:

Scenario: Classroom	Time:

MATERIALS	MACHINERY	EQUIPMENT	TOOLS

Procedures

The Teacher:

- Relates the concepts of order and cleanliness to the workplace.
- Illustrates the types of garbage.
- Applies security and hygiene rules in order to protect the environment and public health.
- Defines the concept and importance of danger zones and access ways.
- Values the importance of demarcation of danger zones and access ways.
- Evaluates danger zones and access ways in the workplace.
- Cites the basic concepts related to each agent or substance.
- Cites the basic concepts related to each agent or substance.
- Comments on the importance of control of agents and substances in the prevention of workplace illness.
- Discusses the articles selected for each of the documents.
- Explains the importance of Law 6727 in the workplace.
- Analyzes situations and apply laws and regulations related to occupational health.

RECOMMENDED CHECKLISTS	Date:

Student´s Name:	

Instructions: The following criteria will be verified in the performance of each student through observation.

From the following list, mark with an 'X' in the column that corresponds to the performance of the student.

DEVELOPMENT	YES	NOT YET	DO NOT APPLY
Clearly, comments on the concept of order and cleanliness in the work place.			
Accurately, distinguishes the types of garbage.			
Competently, explains security and hygiene rules in order to protect the environment and human health.			
Adequately, explains the importance of the use of demarcation and symbols in risk areas.			
Correctly, identifies the concept and importance of danger zones and access ways			
Correctly, applies procedures for the demarcation of danger zones and access ways.			
Clearly, lists the basic concepts related to each agent or substance.			
Correctly, discusses the importance of control of agents and substances in the prevention of workplace illness.			
Accurately, comments on the articles selected for each of the documents.			
Clearly, sustains the importance of Law 6727 in the workplace.			
Correctly, applies laws and regulations related to occupational health.			

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	EVIDENCE	TYPE	EVIDENCE SUFFICIENCY
Apply standards of safety and hygiene for protection of the environment and public health.	Applies standards of safety and hygiene for protection of the environment and public health.	Comments on the concept of order and cleanliness in the work place.	Knowledge	Clearly, comments on the concept of order and cleanliness in the work place.
		Distinguishes the types of garbage.	Knowledge	Accurately, distinguishes the types of garbage.
		Explains security and hygiene rules in order to protect the environment and human health.	Performance	Competently, explains security and hygiene rules in order to protect the environment and human health.
Evaluate the importance of demarcation of danger zones and access ways.	Evaluate the importance of demarcation of danger zones and access ways.	Identifies the concept and importance of danger zones and access ways	Knowledge	Correctly, identifies the concept and importance of danger zones and access ways
		Explains the importance of the use of demarcation and symbols in risk areas.	Performance	Adequately, explains the importance of the use of demarcation and symbols in risk areas.
		Applies procedures for the demarcation of danger zones and access ways.	Product	Correctly, applies procedures for the demarcation of danger zones and access ways.

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	EVIDENCE	TYPE	EVIDENCE SUFFICIENCY
Distinguish the types of agent and substances to which workers are exposed at the workplace.	Distinguishes the types of agent and substances to which workers are exposed at the workplace.	Lists the basic concepts related to each agent or substance.	Knowledge	Clearly, lists the basic concepts related to each agent or substance.
		Mentions the importance of control of agents and substances in the prevention of workplace illness.	Knowledge	Correctly, discusses the importance of control of agents and substances in the prevention of workplace illness.
Apply rules and regulations related to occupational health.	Applies rules and regulations related to occupational health.	Comments on the articles selected for each of the documents.	Knowledge	Accurately, comments on the articles selected for each of the documents.
		Explains the importance of Law 6727 in the workplace.	Performance	Clearly, sustains the importance of Law 6727 in the workplace.
		Applies laws and regulations related to occupational health.	Product	Correctly, applies laws and regulations related to occupational health.

EDUCATIONAL INSTITUTION TECHNICAL STANDARD

GENERAL DATA

Title: Operations and Productivity

Purpose: Implement operations and productivity techniques within a company.

Competency level: Basic

UNITS OF JOB THAT COMPRISE THE STANDARDS

Title	Classification
• Correctly, summarizes the productive organization.	Specific
• Accurately, comments on the profile of an operations administrator.	Specific
• Correctly, characterizes the nature of operations in the service sector.	Specific
• Clearly, explains operations in the service sector.	Specific
• Competently, explains the newest tendencies in Administration of Operations (AO)	Specific
• Clearly, recognizes the challenge of productivity in Administration of Operations (AO)	Specific
• Correctly, lists the problems faced when carrying out correct measurements.	Specific
• Accurately, recognizes productivity variables.	Specific
• Precisely, calculates productivity in Administration of Operations (AO)	Specific

Elements of Competence

Reference	Title of Element
2 - 2	Calculate productivity using business standards.

Performance Criteria:

1. Defines Administration of Operations
2. Explains operations in the service sector.
3. Identifies new tendencies in the administration of operations.
4. Measures of productivity operations.

Field of Application:

Category	Class
Services	Technical Education Teaching Services

Knowledge Evidence:

- Presents a summary about a good or service producing organization.
- Comments on the profile of an operations administrator.
- Lists the problems faced when carrying out correct measurements.
- Identifies the nature of operations in the service sector.

Performance Evidence:

- Explains operations in the service sector.
- Explains the newest tendencies in Administration of Operations (AO)
- Recognizes productivity variables.
- Recognizes the challenge of productivity in Administration of Operations (AO)

Product Evidence:

- Calculates productivity in Administration of Operations (AO)

Sector: Industrial	Program: Logistics Administration and Distribution
Subject-Area: Logistics	Grade: Twelfth
Study Block: Productivity in Operations	Time: 48 hours
Purpose: Implement operations productivity techniques.	

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
1. Define administration of operations	Goods or services producing organization: Concept: • Administration of Operations. • Production. • Marketing. • Production Operations. • Finance, Accounting. • Organizational charts of two service companies and one manufacturing company.	The Teacher: • Comments on a goods or service producing organization. • Describes the profile of an operations administrator. The Student: • Presents a summary about a goods or service producing organization. • Comments on the profile of an operations administrator.	• Capacity for innovation.	• Defines administration of operations

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
2. Explain operations in the service sector.	Operations Administrator. • Concept. • Functions. • Ten critical decisions of Administration of Operations. • The legacy of Administration of Operations. Operations in the service sector: • What is a service? • Difference between products and services. • Difference between service and good. • Growth of services. • Salaries in the service sector. • Development of the service economy.	The Teacher: • Distinguishes the nature of operations in the service sector. • Recognizes operations in the service sector.	• Capacity for innovation.	• Explains operations in the service sector.

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
3. Recognize new tendencies in the administration of operations.	The productivity challenge: • The effective feedback system of the economy, by adding value and turning inputs into outputs. New trends in Administration of Operations A.O: • New challenges for the Operations Administrator:	The Student: • Identifies the nature of operations in the service sector. • Explains operations in the service sector. The Teacher: • Mentions the challenge of productivity in Administration of Operations (AO) • Recognizes the newest tendencies in Administration of Operations (AO)	• Capacity for innovation.	• Recognizes new tendencies in the administration of operations.

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
4. Measure of productivity operations	• Global focus • Just in Time • Supply chain • Fast production • Mass personalization • Delegation • Eco-friendly production Measurement problems: • Quality. • External elements. • Unit of measure. Productivity variables: • Work force. • Capital.	The Student: • Recognizes the challenge of productivity in Administration of Operations (AO) • Explains the newest tendencies in Administration of Operations (AO) The Teacher: • Cites the problems faced when carrying out correct measurements. • Explains productivity variables. • Demonstrates productivity calculations in Administration of Operations (AO)	• Capacity for innovation.	• Measures of productivity operations

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA

	• Administration.
	• Productivity and service sectors.
	• The challenge of social responsibility in A.O.
	
	Measuring productivity:
	• The Productivity Equation.
	• Single-factor productivity.
	• Multi-factor productivity or total factor productivity:
	  • Labor productivity – old system.
	  • Labor productivity - new system.
		The Student:
		• Lists the problems faced when carrying out correct measurements.
		• Recognizes productivity variables.
		• Calculates productivity in Administration of Operations (AO)		

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Multi-factor productivity – old system • Multi-factor productivity - new system.			

PRACTICES AND CHECKLISTS

PRACTICE DEVELOPMENT

STUDY BLOCK: Productivity in Operations	PRACTICE No. 1

Purpose:

Scenario: Classroom	Time:

MATERIALS	MACHINERY	EQUIPMENT	TOOLS

Procedures

The Teacher:

- Comments on good or service-producing organization.
- Describes the profile of an operations administrator.
- Distinguishes the nature of operations in the service sector.
- Recognizes operations in the service sector.
- Recognize the newest tendencies in Administration of Operations (AO)
- Mentions the challenge of productivity in Administration of Operations (AO)
- Cites the problems faced when carrying out correct measurements.
- Explains productivity variables.
- Demonstrates productivity calculations in Administration of Operations (AO)

RECOMMENDED CHECKLISTS:	Date:

Student´s Name:	

Instructions:
The following criteria will be verified in the performance of each student through observation.
From the following list, mark with an 'X' in the column that corresponds to the performance of the student.

DEVELOPMENT	YES	NOT YET	DO NOT APPLY
Gives an accurate summary of good or service-producing organization.			
Accurately, comments on the profile of an operations administrator.			
Correctly, characterizes the nature of operations in the service sector.			
Clearly, explains operations in the service sector.			
Competently, explains the newest tendencies in Administration of Operations (AO)			
Clearly, recognizes the challenge of productivity in Administration of Operations (AO)			
Correctly, lists the problems faced when carrying out correct measurements.			
Accurately, recognizes productivity variables.			
Precisely, calculates productivity in Administration of Operations (AO)			

OBSERVATIONS:

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	EVIDENCE	TYPE	EVIDENCE SUFFICIENCY
Define administration of operations	Define administration of operations	Presents a summary about a goods or service producing organization.	Knowledge	Correctly, summarizes the organization for the production of goods and services.
		Comments on the profile of an operations administrator.	Knowledge	Comments; correctly, on the profile of an Operations Administrator.
Explain operations in the service sector.	Explain operations in the service sector.	Identifies the nature of operations in the service sector.	Knowledge	Correctly, characterizes the nature of operations in the service sector.
		Explains operations in the service sector.	Performance	Clearly, explains operations in the service sector.
		Explains the newest tendencies in Administration of Operations (AO)	Performance	Competently, explains the newest tendencies in Administration of Operations (AO)

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	EVIDENCE	TYPE	EVIDENCE SUFFICIENCY
Identify new tendencies in the administration of operations.	Identifies new tendencies in the administration of operations.	Recognizes the challenge of productivity in Administration of Operations (AO)	Performance	Clearly, recognizes the challenge of productivity in Administration of Operations (AO)
Measure of productivity operations.	Measures of productivity operations.	Lists the problems faced when carrying out correct measurements.	Knowledge	Correctly, lists the problems faced when carrying out correct measurements.
		Recognizes productivity variables.	Performance	Accurately, recognizes productivity variables.
		Calculates productivity in Administration of Operations (AO)	Product	Precisely, calculates productivity in Administration of Operations (AO)

EDUCATIONAL INSTITUTION TECHNICAL STANDARD

GENERAL DATA
Title: Plant Strategies.
Purpose: Design process strategies in industrial plants.
Competency level: Basic

UNITS OF JOB THAT COMPRISE THE STANDARDS

Title	Classification
• Correctly, names the concept, importance and differences among the various types of process approaches.	Specific
• Correctly, elaborates cross-linked graphs for possible volumes of multiple processes.	Specific
• Competently, creates techniques for the analysis and design of processes.	Specific
• Clearly, recognizes the preliminary design of a service.	Specific
• Adequately, enumerates examples of strategies and techniques to improve service productivity.	Specific
• Effectively, designs a service for a fictitious company.	Specific
• Competently, explains computer integrated manufacturing (CIM).	Specific
• Correctly, describes vision systems.	Specific
• Competently, explains environmentally oriented reengineering.	Specific
• Clearly, explains localization strategies.	Specific
• Accurately, calculates labor productivity per-unit cost.	Specific

Title	Classification
• Adequately, enumerates exchange rates and parity risks.	Specific
• Correctly, applies methods to evaluate alternative localizations.	Specific
• Effectively, designs strategies for localization of services.	Specific
• Correctly, names the strategic importance of physical distribution decisions.	Specific
• Correctly, elaborates physical distribution strategies.	Specific
• Precisely, applies the cost equation for materials handling.	Specific
• Correctly, interprets figures, tables and graphs for each type of physical distribution.	Specific
• Correctly, cites the origins and significant examples of work force standards.	Specific
• Clearly, explains the techniques used to establish labor standards.	Specific
• Correctly, uses formulas in order to establish labor standards.	Specific
• Accurately, interprets figures, tables and graphs related to each technique for establishing work force standards.	Specific

Elements of Competence

Reference	Title of Element
2 - 3	Design plant strategies according to business standards.

Performance Criteria:

1. Designs strategies based on process approaches.
2. Explains Computer Integrated Manufacturing (CIM).
3. Develops plant localization strategies.
4. Designs strategies for the physical distribution of manufacturing plant.
5. Determines work time in a manufacturing plant.

Field of Application:

Category	Class
Services	Technical Education Teaching Services.

Knowledge Evidence:

- Names the concept, importance and differences among the various types of process approaches.
- Enumerates examples of strategies and techniques to improve service productivity.
- Enumerates exchange rates and parity risks.
- Names the strategic importance of physical distribution decisions.
- Cites the origins and significant examples of work force standards.

Performance Evidence:

- Recognizes the preliminary design of a service.

- Explains computer integrated manufacturing (CIM).

- Represents vision systems.

- Explains environmentally oriented reengineering.

- Explains localization strategies.

- Explains the techniques used to establish labor standards.

Product Evidence:

- Designs cross-linked graphs for possible volumes of multiple processes.

- Elaborates techniques for the analysis and design of processes.

- Designs a service for a fictitious company.

- Calculates labor productivity per-unit cost.

- Applies methods to evaluate alternative localizations.

- Designs strategies for localization of services.

- Designs physical distribution strategies.

- Applies the cost equation for materials handling.

- Uses formulas in order to establish labor standards.

- Interprets figures, tables and graphs corresponding to each technique in order to establish work force standards.

- Interprets figures, tables and graphs corresponding to each physical distribution.

Sector: Industrial	Program: Logistics Administration and Distribution
Subject-area: Logistics	Grade: Twelfth
Study Block: Plant Strategies.	Time: 104 hours
Purpose: Design strategies for processes in industrial plants.	

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA

1. Design strategies based on process approaches.	Process approach strategies:
	• Concept and importance.
	• Types :
	  • Process Approach.
	  • Repetitive Approach.
	  • Product Approach.
	  • Massive Personality Approach.
		The Teacher:
		• Cites the concept, importance, differences and types of process approach strategies.
		• Elaborates cross-linked graphs for possible volumes of multiple processes.
		• Develops techniques for the analysis and design of processes.
			• Capacity to create and innovate.	• Design strategies based on process approaches.

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Comparative chart of the characteristics of the four process types. • Cross-linked graphs showing variable costs, fixed costs, and total costs, in potential volumes for various processes. Techniques for analysis and design of process: • Flow chart. • Time function graph. • Process charts.	• Explains the preliminary design of a service. • Lists examples of strategies and techniques to improve service productivity. • Exemplifies the design of a service for a fictitious company.		

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA

	Preliminary service design:
	 • Concept and justification.
	 • Design of the service process:
	    • Interaction of the customer and the process design.
	    • Changes in operations within the service process matrix.
	
	 • Opportunities to improve the service process.
	    ▪ Distribution.
	    ▪ Human Resources.
		The Student:
		 • Names the concept, importance and differences among the various types of process approaches.
		 • Designs cross-linked graphs for possible volumes of multiple processes.
		 • Elaborates techniques for the analysis and design of processes.
		 • Recognizes the preliminary design of a service.		

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA

	• Strategies to improve service productivity:
	• Separation.
	• Self-service.
	• Postponement.
	• Approach.
	• Modules.
	• Automatization
	• Scheduling
	• Training.
	
	• Techniques to improve service productivity:
	  • Service structure.
	  • Self-service.
	  • Personalized delivery.
		• Enumerates examples of strategies and techniques to improve service productivity.
		• Designs a service for a fictitious company.		

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
2.Explain computer integrated manufacturing (CIM).	• Restriction of offer. • Selection of service. • Separation of services. • Scheduling of personnel. • Training service options. • Technology in services. • Computer Integrated Manufacturing (CIM). • Concept and justification. • Advantages and disadvantages. • Figure of (CIM).	The Teacher: • Analyzes computer integrated manufacturing (CIM). • Illustrates vision systems.	• Capacity to create and innovate.	• Explains computer integrated manufacturing (CIM).

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA

	• Selection of equipment and technology.
	• Production Technology:
	  • Machine Technology.
	  • Automatic Identification System (AIS).
	  • Process Control.
	  • Vision Systems
	
	Vision Systems
	• Robots.
	• Automatic storage/retrieval system (ASRS).
	• Automated guided vehicle (AGV).
		• Analyzes environmentally oriented reengineering.
		
		The Student:
		
		• Explains computer integrated manufacturing (CIM).
		• Represents vision systems.
		• Explains environmentally oriented reengineering.		

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Flexible Manufacturing System (FMS). Environmentally Oriented Process Re-engineering: • Concept and justification. • Advantages and disadvantages. • Impact of technology in services. • Processes in harmony with the environment.			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA

3.Develop plant localization strategies.	Localization Strategies:
	• Strategic Importance of localization.
	• Factors affecting localization decision:
	  • Country.
	  • Region or community.
	  • Site.
	
	Labor productivity:
	  • Calculation of labor productivity per unit cost.
	
	Exchange rates and parity risks:
		The Teacher:
		• Analyzes localization strategies.
		• Demonstrates the calculation of labor productivity per unit cost.
		• Lists exchange rates and parity risks.
		• Develops methods to evaluate alternative localizations.
		• Analyzes strategies for localization of services.
			• Capacity to create and innovate.	• Develops plant localization strategies.

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	- Costs. - Attitudes. - Distance from markets. - Distance from suppliers. - Distance from competition. - Methods for analysis of localization alternatives: - Qualifying factors. - Break even. - Center of gravity - Transportation.	The Student: - Explains localization strategies. - Calculates labor productivity per-unit cost. - Enumerates exchange rates and parity risks. - Applies methods to evaluate alternative localizations. - Designs strategies for localization of services.		

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA

	Localization strategies for services:
	• Concept and justification.
	• Advantages and disadvantages.
	• Localization strategy table for service companies vs. manufacturing companies.
	• Geographic information systems:
	  • How to select a site for a hotel chain.
	  • Telemarketing.			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA

4. Design strategies for the physical distribution of plant facilities.	Physical distribution Strategies:
	• Strategic importance of physical distribution decisions.
	
	Types of distributions:
	• Fixed position:
	  • Concept, objective and justification.
	  • Advantages and disadvantages.
	
	• Oriented toward process:
	  • Concept, objective and justification.
	  • Advantages and disadvantages.
	  • Materials handling cost Equation.
		The Teacher:
		• Points out strategic importance of decisions regarding physical distribution.
		• Demonstrates the design of physical distribution strategies.
		• Uses the cost equation for materials handling.
		• Analyzes figures, tables and graphs for each type of physical distribution.
			• Capacity to create and innovate.	• Designs strategies for the physical distribution of plant facilities.

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Determine flow of parts between departments. • Determine construction dimensions and a possible distribution of departments. • Create flow chart of inter-departamental flow, showing number of shipments per week. • Design of a possible distribution. • Software for process-oriented distributions.	The Student: • Names the strategic importance of physical distribution decisions. • Designs physical distribution strategies. • Applies the cost equation for materials handling. • Interprets figures, tables and graphs for each type of physical distribution.		

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA

	• Work Cells.
	• Focused work centers and the focused factory.
	
	• Offices:
	  • Concept, objective and justification.
	  • Advantages and disadvantages.
	  • Office relations graph.
	
	• Stores:
	  • Concept, objective and justification.
	  • Advantages and disadvantages.			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Useful ideas for store arrangements. • Insertion Fees. • Service environment (services capes) • Stores and storage: • Concept, objective and justification. • Advantages and disadvantages. • Cross storage. • Random storage. • Personalization.			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Repeated, product-oriented distribution: • Concept, objective and justification. • Advantages and disadvantages. • Production line • Assembly line.			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA

5.Determine work times for a plant.	Work force and work measure standards:
	• Origin.
	• Significant Standards.
	
	Setting work force standards:
	• Historical Experience.
	• Time studies:
	  • What they imply.
	  • Setting the standards:
	  • Task Definitions.
	  • Task Division.
	  • Number of cycles or necessary samples.
		The Teacher:
		• Points out the origins and significant examples of work force standards.
		• Analyzes the techniques used to establish labor standards.
		• Demonstrates the use of formulas to set work force standards.
		• Analyzes figures, tables and graphs related to each technique for establishing work force standards.
			• Capacity to create and innovate.	• Determines work times for a plant.

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	- Time taking and performance evaluations. - Average observed cycle. - Performance rating and normal time. - Sum of normal times - Standard time - Personal times - Sampling process: - Desired precision.	The Student: - Cites the origins and significant examples of work force standards. - Explains techniques used to establish work force standards. - Uses formulas to establish work force standards. - Interprets figures, tables and graphs related to each work force standard technique		

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Level of confidence. • Variation between elements. • Sample size formula. Predetermined Standards: • Concept, objective, advantages - disadvantages and origin. • Therbligs. • Time Measurement Units (TMU). • Sample MTM table, for grab and place movements.			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Cameras on arms and legs of workers to measure movements (Gilbreth). Work sampling: • What allow it and what is it used for? • Purposes, advantages and disadvantages. • Procedure for work sampling. • Formula to calculate size of sample for desired levels of confidence.			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Time study with work sampling.			

PRACTICES AND CHECKLISTS

PRACTICE DEVELOPMENT

STUDY BLOCKS: Plant Strategies	PRACTICE No. 1

Purpose:

Scenario:	Time:

MATERIALS	MACHINERY	EQUIPMENT	TOOLS

Procedures

The Teacher:

- Cites the concept, important differences, and types of strategies of process approaches.
- Elaborates cross-linked graphs for possible volumes of multiple processes.
- Develops techniques for the analysis and design of processes.
- Explains the preliminary design of a service.
- Lists examples of strategies and techniques to improve service productivity.
- Exemplifies the design of a service for a fictitious company.
- Analyzes computer integrated manufacturing (CIM).
- Illustrates vision systems.
- Analyzes environmentally oriented reengineering.
- Analyzes localization strategies.
- Demonstrates the calculation of labor productivity per unit cost.
- Lists exchange rates and parity risks.
- Develops methods to evaluate alternative localizations.
- Analyzes strategies for localization of services.
- Points out the strategic importance of physical distribution decisions.
- Demonstrates the design of physical distribution strategies.
- Uses the cost equation for materials handling.
- Analyzes figures, tables and graphs for each type of physical distribution.
- Points out the origins and significant examples of work force standards.
- Analyzes the techniques used to establish labor standards.
- Demonstrates the use of formulas to set work force standards.
- Analyzes figures, tables and graphs related to each technique for establishing work force standards.

RECOMMENDED CHECKLISTS		Date:		

Student Name:				

Instructions:

The following criteria will be verified in the performance of each student through observation.

From the following list, mark with an 'X' in the column that corresponds to the performance of the student.

DEVELOPMENT	YES	NOT YET	DO NOT APPLY
Correctly, names the concept, importance and differences among the various types of process approaches.			
Correctly, elaborates cross-linked graphs for possible volumes of multiple processes.			
Competently, creates techniques for the analysis and design of processes.			
Clearly, recognizes the preliminary design of a service.			
Adequately, enumerates examples of strategies and techniques to improve service productivity.			
Effectively, designs a service for a fictitious company.			
Competently, explains computer integrated manufacturing (CIM).			
Correctly, describes vision systems.			
Competently, explains environmentally oriented reengineering.			
Clearly, explains localization strategies.			
Accurately, calculates labor productivity per-unit cost.			
Adequately, enumerates exchange rates and parity risks.			

DEVELOPMENT	YES	NOT YET	DO NOT APPLY
Correctly, applies methods to evaluate alternative localizations.			
Effectively, designs strategies for localization of services.			
Correctly, names the strategic importance of physical distribution decisions.			
Correctly, elaborates physical distribution strategies.			
Precisely, applies the cost equation for materials handling.			
Correctly, interprets figures, tables and graphs for each type of physical distribution.			
Correctly, cites the origins and significant examples of work force standards.			
Clearly, explains the techniques used to establish labor standards.			
Correctly, uses formulas in order to establish labor standards.			
Accurately, interprets figures, tables and graphs related to each technique for establishing work force standards.			

OBSERVATIONS:

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	EVIDENCE	TYPE	EVIDENCE SUFFICIENCY
Design process approach strategies.	Designs process approach strategies.	Names the concept, importance and differences among the various types of process approaches.	Knowledge	Correctly, names the concept, importance and differences among the various types of process approaches.
		Enumerates examples of strategies and techniques to improve service productivity.	Knowledge	Adequately, enumerates examples of strategies and techniques to improve service productivity.
		Recognizes the preliminary design of a service.	Performance	Clearly, recognizes the preliminary design of a service.
		Designs cross-linked graphs for possible volumes of multiple processes.	Product	Correctly, elaborates cross-linked graphs for possible volumes of multiple processes.
		Elaborates techniques for the analysis and design of processes.	Product	Competently, creates techniques for the analysis and design of processes.
		Designs a service for a fictitious company.	Product	Effectively, designs a service for a fictitious company.

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	EVIDENCE	TYPE	EVIDENCE SUFFICIENCY
Explain computer integrated manufacturing (CIM).	Explains computer integrated manufacturing (CIM).	Explains computer integrated manufacturing (CIM).	Performance	Competently, explains computer integrated manufacturing (CIM).
		Represents vision systems.	Performance	Correctly, describes vision systems.
		Explains environmentally oriented reengineering.	Performance	Competently, explains environmentally oriented reengineering.
Develop plant localization strategies.	Develops plant localization strategies.	Enumerates exchange rates and parity risks.	Knowledge	Adequately, enumerates exchange rates and parity risks.
		Explains localization strategies.	Performance	Clearly, explains localization strategies.
		Calculates labor productivity per-unit cost.	Product	Accurately, calculates labor productivity per-unit cost.

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CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	EVIDENCE	TYPE	EVIDENCE SUFFICIENCY
		Applies methods to evaluate alternative localizations.	Product	Correctly, applies methods to evaluate alternative localizations.
		Designs strategies for localization of services.	Product	Effectively, designs strategies for localization of services.
Design strategies for the physical distribution of plant facilities.	Designs strategies for the physical distribution of plant facilities.	Names the strategic importance of physical distribution decisions.	Knowledge	Correctly, name the strategic importance of physical distribution decisions.
		Designs physical distribution strategies.	Product	Correctly, elaborates physical distribution strategies.
		Applies the cost equation for materials handling.	Product	Precisely, applies the cost equation for materials handling.
		Interprets figures, tables and graphs for each type of physical distribution.	Product	Correctly, interprets figures, tables and graphs for each type of physical distribution.

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	EVIDENCE	TYPE	EVIDENCE SUFFICIENCY
Determine measuring times for plan work.	Determines measuring times for plan work.	Cites the origins and significant examples of work force standards.	Knowledge	Correctly, cites the origins and significant examples of work force standards.
		Explains the techniques used to establish labor standards.	Performance	Clearly, explains the techniques used to establish labor standards.
		Uses formulas in order to establish labor standards.	Product	Correctly, uses formulas in order to establish labor standards.
		Interprets figures, tables and graphs related to each technique for establishing work force standards.	Product	Accurately, interprets figures, tables and graphs related to each technique for establishing work force standards.

MANUFACTURING OPERATIONS

DISTRIBUTION OF STUDY BLOCKS
Manufacturing Operations

Study Blocks	Name	Time in Hours	Weeks per Study Block
I	Business Skill Educational Unit.	80	10
II	Design of Goods and Services.	56	7
III	Warehouse Management.	64	8
	TOTAL	**200**	**25**

MANUFACTURING OPERATIONS

DESCRIPTION:

Manufacturing Operations, at 8 hours per week, consists of three study blocks:

Business Studies Unit: students will learn to create and develop their own virtual company, fostering an entrepreneurial culture.

Design of Goods and Services: students will design useful products and services for the administration of business inventories.

Warehouse Management: students will learn to use systems and procedures needed to adequately manage a warehouse.

GENERAL OBJECTIVES

- Create your own company, both physically and virtually.
- Design products and services that are subsequently delivered to the warehouse for storage.
- Efficiently administer the warehouse in any type of company.

EDUCATIONAL INSTITUTION TECHNICAL STANDARD

GENERAL DATA

Title: Business Studies Unit.
Purpose: Perform functions from your specialization in a simulated company.
Competency level: Basic.

UNITS OF JOB THAT COMPRISE THE STANDARDS

Title	Classification
• Correctly, explains the nature of the practice company.	Specific
• Clearly, differentiates between the responsibilities of the students and the teacher in the practice company.	Specific
• Accurately, elaborates the expected products within a practice company.	Specific
• Efficiently, uses equipment and tools in the practice company.	Specific
• Lives realistic educational experience workplace settings.	Specific

Elements of Competence

Reference	Title of Element
3 - 1	Develop an entrepreneurial culture.

Performance Criteria:

1. Identifies the elements of the practice company.
2. Elaborates products at different levels with a practice company.

Field of Application:

Category	Class
Services	Technical Education Teaching Services.

Knowledge Evidence:

- Explains the nature of the practice company.
- Distinguishes between the responsibilities of the students and the teacher in the practice company.

Performance Evidence:

- Uses equipment and tools in the practice company.
- Experiences authentic educational workplace settings.

Product Evidence:

- Elaborates the expected products within a practice company.

Sector: Industrial	Program: Logistics Administration and Distribution
Subject-area: **:** Manufacturing Operations	Grade: Twelfth
Study Block: Plant Strategies.	Time: 80 hours
Purpose: Business Studies Unit	

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
1. Identify the elements of the practice company.	Concept of Practice Company Practice company Labor@: • Justification • Practice company in an institution. • Selection of participants • Formation of a practice company (department, company money, minimum contents)	The Teacher: • Justifies the concept and nature of the practice company. • Identifies the responsibilities of teachers and students regarding the practice company.	• Develop your creative capacity.	• Identifies the elements of the practice company.

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Responsibility of teacher and student	The Student: • Explains the concept and nature of the practice company. • Distinguishes the responsibilities of teachers and student regarding the practice company. .		

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
2. Elaborate products at different levels within a practice company.	Expected Products: • Business Idea • Mission, Vision (visible). • Documents with company name and logo. • Organizational chart clearly indicating names and positions in each area. • Clear objectives and values. • Planning document covering each area. • Feasibility study. • Digital documents.	The Teacher: • Creates the expected products within a practice company. • Demonstrates the use of equipment and tools in the practice company. • Generates educational experiences in the workplace.	• Develop your creative capacity.	• Elaborates products at different levels within a practice company.

MINISTERIO DE EDUCACIÓN PÚBLICA
Department de Especialidades Técnicas.

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Documents that reflect use of word processer, spreadsheet, presentation and Internet • Legal documents (act of incorporation, business ID, permits from city, tax authority, and health department). • Catalogue of company's goods and/or services offered. • Reference list for pricing.	The Student: • Elaborates the expected products within a practice company. • Uses equipment and tools in the practice company. • Experiences authentic educational practice at the workplace.		

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Inventory of materials and resources of the company, as well as goods for sale. • Accounting with financial statements registered in corresponding books. • Manual of procedures (recruiting, selection, orientation or training). • Job Description with respective profile.			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Data base (payroll) with names and profiles of employees, positions, work schedules and base salaries. • Attendance control • Commercial documents • Sales and purchases • Disposition of initial capital, documented			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Transactions with respective documentation • Initial operating budget separate from working capital • Rotation of personnel • Company bank account • At least one monthly personnel meeting. • Company registered in Operations Center			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Electronic files in logical order and easy to access. • Process diagram • Customer satisfaction documentation • Promotional material in the form of brochures, business cards, flyers, etc. (minimum of three media) • Design of Web page or blog. • Communication log for correspondence sent and received. • Budget.			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Management documents and financing requests (budgets, investments, bank account, credit applications) • Salaries calculated at market rate and deposited in bank account. • Communication with employees regarding payroll activity (electronic or otherwise)			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Personnel files for each employee, with date of entry, personal information, positions and evaluations. • Bank transactions and payroll payments through Operations Center. • Periodic report on progress of project. • Financial statement, real vs. projected • Emergency plan for occupational health.			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• HR report with data on rotation (change in posts). • Health benefits and social security paid through Operations Center. • Market studies. • Import / export processes. • Documents in Spanish and English • Corporate Social Responsibility project • Professional development plan			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Bank statements • Sales projections • Proof of corporate and payroll taxes paid through Operations Center Correct use of equipment: • Adding machines • Fax • Computers and accessories • Photocopiers • Telephones			

PRACTICES AND CHECKLISTS

PRACTICE DEVELOPMENT

STUDY BLOCK: Business Studies Unit	PRACTICE No. 1

Purpose:

Scenario:	Time:

MATERIALS	MACHINERY	EQUIPMENT	TOOLS

Procedures

The Teacher:

- Justifies the concept and nature of the practice company.
- Identifies the responsibilities of teachers and students regarding the practice company.
- Creates the expected products within a practice company.
- Demonstrates use of equipment and tools in the practice company.
- Generates educational workplace experiences.

RECOMMENDED CHECKLISTS:	Date:		
Student´s Name:			
Instructions: The following criteria will be verified in the performance of each student through observation. From the following list, mark with an 'X' in the column that corresponds to the performance of the student.			

DEVELOPMENT	YES	NOT YET	DO NOT APPLY
Correctly, explains the nature of the practice company.			
Clearly, differentiates the responsibilities of the teachers and students regarding the practice company.			
Accurately, elaborates the expected products within a practice company.			
Efficiently, uses equipment and tools in the practice company.			
Creates a realistic workplace educational experience.			

OBSERVATIONS:

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	EVIDENCE	TYPE	EVIDENCE SUFFICIENCY
Identify the elements of the practice company.	Identifies the elements of the practice company.	Explains the nature of the practice company.	Knowledge	Correctly, explains the nature of the practice company.
		Distinguishes the responsibilities of the teachers and students regarding the practice company.	Knowledge	Clearly, differentiates the responsibilities of the teachers and students regarding the practice company.
Elaborate products at different levels within the practice company.	Elaborates products at different levels within the practice company.	Uses equipment and tools in the practice company.	Performance	Efficiently, uses equipment and tools in the practice company.
		Elaborates the expected products within a practice company.	Product	Accurately, elaborates the expected products within a practice company.
		Experiences authentic educational practice at the workplace.	Product	Lives a realistic educational experience in the workplace.

EDUCATIONAL INSTITUTION TECHNICAL STANDARD

GENERAL DATA:

Title:　　　　　Design of Goods and Services.
Purpose:　　　　Design a product or service according to given specifications and requirements.
Competency level: Basic

UNITS OF JOB THAT COMPRISE THE STANDARDS

Title	Classification
• Competently, explains how to select products and services.	Specific
• Effectively, selects well designed products and services.	Specific
• Correctly, uses brainstorming to generate new ideas.	Specific
• Competently, explains the process of product development.	Specific
• Adequately, explains what to take into account in the design of products.	Specific
• Clearly, explains time-based competition.	Specific
• Adequately, explains a product's specifications.	
• Effectively designs products from the perspective of its specifications.	Specific
• Correctly, recognizes the documents used for the production and design of services.	Specific
• Correctly, uses decision trees to design products and services.	Specific

Elements of Competence

Reference	Title of Element
3 - 2	Calculate forecasts following business standards.

Performance Criteria:

1. Selects well-designed products and services.
2. Manufacture newly designed products.
3. Defines a product from the design perspective.
4. Identifies the documents needed for the production and design of services.

Field of Application:

Category	Class
Services	Technical Education Teaching Services.

Knowledge Evidence:

- Mentions time-based competition.

Performance Evidence:

- Explains how to select products and services.
- Explains the process of product development.
- Explains what to take into account in the design of products.

- Recognizes the documents used for the production and design of services.
- Selects well designed products and services.
- Explains a product's specifications.

Product Evidence:

- Uses brainstorming to generate new ideas.
- Designs product from the specifications perspective.
- Uses decision trees to design products and services.

Sector: Industrial	Program: Logistics Administration and Distribution
Subject-Area: Manufacturing Operations	Grade: Twelfth
Study Block: Design of products and services	Time: 56 hours
Purpose: Design a product or service according to given specifications and requirements.	

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
1. Select well - designed products and services.	Selection of products and services: • Strategic product decision supported by competitive advantages • Product life cycle. • Determine product life cycle – sales – costs – profit • Life cycle and strategy • Product analysis by value proposition	The Teacher: • Analyzes how to select products and services. • Designs with adequate products and services. • Develops brainstorming to generate new ideas. The Student: • Explains how to select products and services.	• Interested in new challenges.	• Selects well - designed products and services.

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
2. Manufacture the newly designed products.	Generate ideas for new product: • Opportunities. • Brainstorming. • Importance of new products Product development: • Product development System • Graph with product development stages • Quality function Deployment. (QFD). • House of Quality (HOQ).	• Selects well - designed products and services. • Uses brainstorming to generate new ideas. The Teacher: • Analyzes the process of product development. • Recognizes what to take into account in the design of products. • Comments on time-based competition.	• Interested in new challenges.	• Manufacture the newly designed products.

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	- House of Quality (HOQ) sequence. - Organization for development of product. - Manufacturability and value engineering. Considerations for the design of products: - Robust Design. - Modular Design. - Design assisted by computer (CAD): - Design for manufacture and assembly. 3D modeling	The Student: - Explains the process of product development. - Explains what to take into account in the design of products. - Mentions time-based competition.		

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA

	• Standard for Exchange of Product model Data (STEP).
	• Computer Assisted Manufacturing(CAM):
	  • Benefits of CAD and CAM.
	  • Virtual reality technology.
	  • Value Analysis.
	• Designs in harmony with the environment:
	  • Equipment for environmental protection.
	  • Green Manufacturing.
	
	Time-based competition:			

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
3. Define a product from the design perspective.	• Continuous product development. • Buy technology through acquisition of another company. • Joint ventures. • Alliance. • Definition of a product as a function of its specifications. • Drafting. • Lists of materials (LDM). • Do it or buy it? • Group Technology.	The Teacher: • Explains a product's specifications. • Develops a product from the specifications perspective.	• Interested in new challenges.	• Defines a product from the design perspective.

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
4. Identify the documents needed for the production and design of services.	Documents for production: • Assembly drawing. • Assembly Graph. • Road map • Work order. • Engineering change notice. (ECN). Service design: • Configuration management.	The Student: • Explains a product's specifications. • Designs product from the specifications perspective. The Teacher: • Identifies the documents used for the production and design of services. • Applies decision trees to design products and services.	• Interested in new challenges.	• Identifies the documents needed for the production and design of services.

LEARNING OUTCOMES	CONTENTS	TEACHING-LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Participation of customer in the service design. • Monument to the truth. • Documents for services. • Application of decision trees for product design. • Use decision trees for product design. • Transition to production.	The Student: • Recognizes the documents used for the production and design of services. • Uses decision trees to design products and services.		

Dirección de Educación Técnica
y Capacidades Emprendedoras

PRACTICES AND CHECKLISTS

PRACTICE DEVELOPMENT

STUDY BLOCK: Design of products and services.	PRACTICE No. 1

Purpose:

Scenario:	Time:

MATERIALS	MACHINERY	EQUIPMENT	TOOLS

Procedures

The Teacher:

- Analyzes how to select products and services.
- Designs with adequate products and services.
- Develops brainstorming to generate new ideas.
- Analyzes the process of product development.
- Recognizes what to take into account in the design of products.
- Comments on time-based competition.
- Explains a product's specifications.
- Develops product from the specifications perspective.
- Identifies the documents used for the production and design of services.
- Applies decision trees to design products and services.

RECOMMENDED CHECKLISTS	Date:

Student´s Name:	

Instructions:

The following criteria will be verified in the performance of each student through observation.

From the following list, mark with an 'X' in the column that corresponds to the performance of the student.

DEVELOPMENT	YES	NOT YET	DO NOT APPLY
Competently, explains how to select products and services.			
Effectively, selects well designed products and services.			
Correctly, uses brainstorming to generate new ideas.			
Competently, explains the process of product development.			
Adequately, explains what to take into account in the design of products.			
Clearly, explains time-based competition.			
Adequately, explains a product's specifications.			
Effectively, designs products from the perspective of its specifications.			
Correctly, recognizes the documents used for the production and design of services.			
Correctly, uses decision trees to design products and services.			

OBSERVATIONS:

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	EVIDENCE	TYPE	EVIDENCE SUFFICIENCY
Select well - designed products and services.	Selects well- designed products and services.	Explains how to select products and services.	Performance	Competently, explains how to select products and services.
		Selects well- designed products and services.	Performance	Effectively, selects well - designed products and services.
		Explains the process of product development.	Performance	Competently, explains the process of product development.
		Use brainstorming to generate new ideas.	Product	Correctly, uses brainstorming to generate new ideas.
Manufacture newly designed products.	Manufactures newly designed products.	Mentions time-based competition.	Knowledge	Clearly, explains time-based competition.
		Explains what to take into account in the design of products.	Performance	Adequately, explains what to take into account in the design of products.

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	EVIDENCE	TYPE	EVIDENCE SUFFICIENCY
		Explains a product's specifications.	Performance	Adequately, explains a product's specifications.
Define a product from the design perspective.	Defines a product from the design perspective.	Recognizes the documents used for the production and design of services.	Performance	Correctly, recognizes the documents used for the production and design of services.
Identify the documents needed for the production and design of services.	Identifies the documents needed for the production and design of services.	Designs products from the perspective of its specifications.	Product	Effectively, designs products from the perspective of its specifications.
		Uses decision trees to design products and services.	Product	Correctly, uses decision trees to design products and services.

EDUCATIONAL INSTITUTION TECHNICAL STANDARD

GENERAL DATA:

Title: Warehouse Administration.
Purpose: Use diverse tools to efficiently manage a warehouse.
Competency level: Basic

UNITS OF JOB THAT COMPRISE THE STANDARDS

Title	Classification
• Correctly, names the concept, role, importance, functions, objectives and other generalities of warehouse management.	Specific
• Correctly, use the tools and basic procedures for warehouse management	Specific
• Participates ;actively, in the Simulation of a warehouse process.	
• Clearly, explains the concept, importance, objectives, and justification of inventory.	Specific
• Clearly, explains the theoretical fundamentals of inventory management and its importance within the context of business management.	Specific
• Takes accurate physical inventories within a company.	Specific
	Specific

Elements of Competence

Reference	Title of Element
3 - 3	Manage warehouse according to business standards.

MINISTERIO DE EDUCACIÓN PÚBLICA
Department de Especialidades Técnicas.

Performance Criteria:

- Analyzes the tools and basic procedures for warehouse management
- Explains the theoretical fundamentals of inventory management and its importance within the context of business management.

Field of Application:

Category	Class
Services	Technical Education Teaching Services

Knowledge Evidence:

- Names the concept, role, importance, functions, objectives and other generalities of warehouse management.
- Mentions the concept, importance, objectives, and justification of inventory.

Performance Evidence:

- Explains the theoretical fundamentals of inventory management and its importance within the context of business management.

Product Evidence:

- Uses the tools and basic procedures for warehouse management
- Participates in the simulation of a warehouse process.
- Takes physical inventories in a company.

MINISTERIO DE EDUCACIÓN PÚBLICA
Department de Especialidades Técnicas.

Dirección de Educación Técnica y Capacidades Emprendedoras

Sector: Industrial	Program: Logistics Administration and Distribution
Subject-Area: Manufacturing Operations	Grade: Twelfth
Study Block: Warehouse Management	Time: 64 hours
Purpose: Use diverse tools to efficiently manage a warehouse.	

LEARNING OUTCOMES	CONTENTS	TEACHING - LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
1. Analyze the tools and basic procedures for warehouse management	Warehouse Management: • Modern concept. • Role of the warehouse in the organization. • Basic value of service to internal and external customers. • Physical distribution of a warehouse and special areas for receiving and dispatching.	The Teacher: • Cites the concept, role, importance, functions, objectives and other generalities warehouse management. • Analyzes the tools and basic procedures for warehouse management • Simulates a warehouse process.	• Prefers to verify the facts before judging.	• Analyzes the tools and basic procedures for warehouse management

LEARNING OUTCOMES	CONTENTS	TEACHING - LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Passages (principal, longitudinal, transversal, or secondary). • Equipment for internal transportation. • Analysis of process of reception, storage, and dispatch. • Necessary documentation and description of the procedure. • Controls (quantity, quality, physical condition, protection, location).	The Student: • Names the concept, role, importance, functions, objectives and other generalities of warehouse management. • Uses the tools and basic procedures for warehouse management • Participates in the Simulation of a warehouse process.		

LEARNING OUTCOMES	CONTENTS	TEACHING - LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Methods for classification of stock (ABC). • Protection and codification of materials. • Basic norms of safety and occupational hygiene, for a better work environment.			

LEARNING OUTCOMES	CONTENTS	TEACHING - LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
2. Explain the theoretical fundamentals of inventory management and its importance within the context of business management.	Inventories: • Function and importance. • Inventory size and justification. • Demand of articles and category • How to analyze demand. • Inventory handling costs. • Inventory management techniques. • Theory of Maximums and Minimums (how and when). • Reorder point (time and quantity) and application.	The Teacher: • Cites the concept, importance, objectives, and justification of inventory. • Analyzes the theoretical fundamentals of inventory management and its importance within the context of business management. • Demonstrates how to carry out physical inventories.	• Prefers to verify the facts before judging.	• Explains the theoretical fundamentals of inventory management and its importance within the context of business management.

LEARNING OUTCOMES	CONTENTS	TEACHING - LEARNING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	• Inventory analysis: rotation index, stock rotation. • How to analyze and define obsolesce. • Inventory accounting methods: FIFO, LIFO, moving average. • Physical count as inventory control tool.	The Student: • Mentions the concept, importance, objectives, and justification of inventory. • Explains the theoretical fundamentals of inventory management and its importance within the context of business management. • Takes physical inventories		

PRACTICES AND CHECKLISTS

PRACTICE DEVELOPMENT

STUDY BLOCK: Warehouse Management.	PRACTICE No. 1

Purpose:

Scenario:	Time:

MATERIALS	MACHINERY	EQUIPMENT	TOOLS

Procedures

The Teacher:

- Cites the concept, role, importance, functions, objectives and other generalities of warehouse management.
- Analyzes the tools and basic procedures for warehouse management
- Simulates a warehouse process.
- Cites the concept, importance, objectives, and justification of inventory.
- Analyzes the theoretical fundamentals of inventory management and its importance within the context of business management.
- Demonstrates how to carry out physical inventories.

RECOMMENDED CHECKLISTS	Date:

Student´s Name:	

Instructions:
The following criteria will be verified in the performance of each student through observation.
From the following list, mark with an 'X' in the column that corresponds to the performance of the student.

DEVELOPMENT	YES	NOT YET	DO NOT APPLY
Correctly, names the concept, role, importance, functions, objectives and other generalities warehouse management.			
Correctly, uses the tools and basic procedures for warehouse management			
Participates; actively, in the simulation of a warehouse process.			
Clearly, explains the concept, importance, objectives, and justification of inventory.			
Clearly, explains the theoretical fundamentals of inventory management and its importance within the context of business management.			
Takes accurate physical inventories in a company.			

OBSERVATIONS:

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	EVIDENCE	TYPE	EVIDENCE SUFFICIENCY
Analyze the tools and basic procedures for warehouse management	Analyzes the tools and basic procedures for warehouse management	Names the concept, role, importance, functions, objectives and other generalities of warehouse management.	Knowledge	Correctly, names the concept, role, importance, functions, objectives and other generalities warehouse management.
		Uses the tools and basic procedures for warehouse management	Product	Correctly, uses the tools and basic procedures for warehouse management
		Participates in the simulation of a warehouse process.	Product	Participates ;actively, in the Simulation of a warehouse process.

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	EVIDENCE	TYPE	EVIDENCE SUFFICIENCY
Explain the theoretical fundamentals of inventory management and its importance within the context of business management.	Explains the theoretical fundamentals of inventory management and its importance within the context of business management.	Mentions the concept, importance, objectives, and justification of inventory.	Knowledge	Clearly explains the concept, importance, objectives, and justification of inventory.
		Explains the theoretical fundamentals of inventory management and its importance within the context of business management.	Performance	Clearly explains the theoretical fundamentals of inventory management and its importance within the context of business management.
		Takes physical inventories within a company.	Product	Takes accurate physical inventories within a company.

SUB – ÁREA: ENGLISH FOR COMMUNICATION

TWELFTH   LEVEL

English classes have given me confidence in the four skills, no matter what profession I choose!

DISTRIBUTION OF UNITS
ENGLISH FOR COMMUNICATION

Twelfth Level

Unit	Name of the unit	Estimated time in hours	Amount of weeks per unit
1	Day to day	20 hrs	5 weeks
2	Customer service	20 hrs	5 weeks
3	Stand for excellence.	20 hrs	5 weeks
4	Travel.	20 hrs	5 weeks
5	Astounding Future Career.	20 hrs	5 weeks
	TOTAL	**100 hrs**	**25 weeks**

Subject area: English for Communication	Level: Twelfth
Unit 1 : **Day to Day Work**	Hours per unit: 20 hours
Cognitive target: Exchanging information about: day to day work.	

LINGUISTIC ACHIEVEMENTS	CONTENT	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
LISTENING • Talking about my work by describing daily activities. • Asking and giving information about working routines. • Describing times and conditions of my job. **SPEAKING** • Expressing likes and dislikes in my daily life. • Interviewing a classmate about safety devices.	**Functions** • Asking questions regarding working routines. • Talking about your daily working schedule. • Describing likes and dislikes. • Examining job skills and qualifications. • Making wise choices.	**The students:** • Talk about which hours that you prefer to work based on the business hours around the world. • Role play, people saying what they like about their jobs. • Classify a list of items connected with work which are important and not important to you.	• Observe critically. • Exercises leadership	**The students:** • Talk about my work by describing daily activities. • Ask and give information about working routines. • Describe times and conditions of my job. • Express likes and dislikes in my daily life. • Interview a classmate about safety devices.

LINGUISTIC ACHIEVEMENTS	CONTENT	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
READING • Reading about home and safety. • Reading an advertisement about a new product **WRITING** • Writing reported speech using quotes. • Writing a plan to improve safety in your home.	**Language** • Prepositions. • Adverbs of frequency. • Phrasal Verbs. • Verbs followed by – ing. • Reported speech • Reported speech with say and tell. • Used to, be used.	**The students:** • Read an online advertisement. • Read with understanding. • Plan for a safe environment. • Write a short letter describing the working conditions in a company you work. • Convey ideas in writing.	• Guide others. • Planning ahead of time.	**The students:** • Read about home and safety. • Read an advertisement about a new product. • Write reported speech using quotes. • Write a plan to improve safety in your home.

Subject area: English for Communication	Level: Twelfth
Unit 2 : **Customer service**	Hours per unit: 20 hours
Cognitive target: Interprets and communicates information about: customer service	

LINGUISTIC ACHIEVEMENTS	CONTENT	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
LISTENING • Understanding specifications about the elements of effective telephone communications. • Identifying specific details from conversations about customers. • Applying techniques to improve effectiveness as a listener.	**Functions** • Identifying elements of effective telephone communication. • Managing to ensure courtesy in business telephone contacts. • Smiling before you pick up the phone. • Leaving a good last impression. • Letting customers know you want to help.	**The students:** • Listen to oral techniques about courtesy • Comprehend how to determine the customer needs • Role play how to treat every caller as a welcome guest activity • Development of skills to become a good clerk in customer service by attending the telephone	• Respect for different styles, methods and procedures. • Understand and be understood by others	**The students:** • Understand specifications about the elements of effective telephone communications. • Identify specific details from conversations about customers. • Apply techniques to improve effectiveness as a listener. • Speak appropriately while taking part in short conversations.

LINGUISTIC ACHIEVEMENTS	CONTENT	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
SPEAKING • Speaking appropriately while taking part in short conversations.Defining the importance of proper telephone techniques in providing excellent service to customers **READING** • Understanding details from text, passages and others .	Asking the customer to repeat if the message is not clear **Language** • Define service mentality? • What is a customer? • How many customers do you think you can attend by day? • Which is the most important key in the service mentality? • Callers can hear your smile even when they can't see it • Give every caller the same courteous, friendly, professional treatment.	**The students:** • Development of skills to become a better clerk in customer service. • Completion of charts by listening to people speaking about the service attitude to provide high quality customer service.	• Learn from experience • Empathy • Enthusiasm • Ownership • Responsibility • Adaptability	**The students:** • Define the importance of proper telephone techniques in providing excellent service to customers. • Understand details from text, passages and others. • State the importance of attitude and creativity in providing high quality customer service.

LINGUISTIC ACHIEVEMENTS	CONTENT	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
WRITING • Stating the importance of attitude and creativity in providing high quality customer service. • Taking notes about specifications.	• Take the initiative. • Greet the caller with a pleasant buffer. • Ask don't demand. • Politeness is never out of style. • Don't make or take calls anonymously			• Take notes about specifications.

Subject area: English for Communication	Level: Twelfth
Unit 3 : **Stand for excellence**	Hours per unit: 20 hours
Cognitive target: Exchanging information about: the ability to work cooperatively with others as a member of a team.	

LINGUISTIC ACHIEVEMENTS	CONTENT	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
LISTENING • Listening to information about schools. • Listening to a conversation between an employer and an employee**.** • Listening to a conversation between coworkers**.**	**Functions** • Discussing about adult education. • Describing types of coursework. • Identifying job skills. • Defining feelings. • Stating work communication. • Defining job training.	**The students:** • Acquire and evaluate information. • Listen actively to conversations among different people in order to take notes. • Role play, a conversation between a parent and a child. • Interpret and communicate information.	• Plan for the future. • Take responsibility for learning. • Cooperate with others.	**The students:** • Listen to information about schools. • Listen to a conversation between an employer and an employee**.** • Listen to a conversation between coworkers**.** • Talk about programs and courses. • Express encouragement when having a conversation.

LINGUISTIC ACHIEVEMENTS	CONTENT	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
SPEAKING • Talking about programs and courses. • Expressing encouragement when having a conversation. **READING** • Understanding details from school text or passages. • Reading and discussing about job skills. **WRITING**	**Language** • Simple present and present continuous. • Correlative conjunctions. • Expressing future time with will, be going to, and the present continuous. • Part time clauses with after, when, as soon as, before, and until. • Simple past and present perfect. • Express similarities with so, too, either and neither. • Reductions with n´t.	**The students:** • Reading a career school advertisement. • Reading an email from a teacher. • Reading a job evaluation form. • Reading notes from an interview. • Reading a letter requesting a raise. • Write statements about yourself. • Make a list of programs and courses of interest to you. • Write a letter to a professor. • Fill out a work schedule.	• Solve problems. • Make decisions.	**The students:** • Understand details from school text or passages. • Read and discuss about job skills. • Organize information regarding options between job benefits. • Organize information regarding personal qualities

LINGUISTIC ACHIEVEMENTS	CONTENT	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
• Organizing information regarding options between job benefits. • Organizing information regarding personal qualities		• List personal qualities on a chart. • Write a persuasive letter.		

Subject area: English for Communication			Level: Twelfth	
Unit 4 : **Travel**			Hours per unit: 20 hours	
Cognitive target: Interprets and communicates information about travelling**.**				

LINGUISTIC ACHIEVEMENTS	CONTENT	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
LISTENING • Listening about what do you do in Costa Rica to thank people. • Listening to statements about a map in order to get to any specific place. **SPEAKING** • Explaining leisure and entertainment possibilities to a visitor.	**Functions** • Finding out about a city. • Making offers. • Thanking • Making recommendations. • Travelling for business and pleasure. • Copying with difficult travel situations. • Doing flight reservation. • Renting a car.	**The students:** • Listen to statements about what people are doing in a business travel. • Role play about a visitor that is coming form abroad to your international marketing company and you are going to help organize her/his visit.	• Social and cultural background of people from different countries.	**The students:** • Listen to what do you do in Costa Rica to thank people. • Listen to statements about a map in order to get to any specific place. • Explain leisure and entertainment possibilities to a visitor. • Discuss about weather concerns when travelling.

LINGUISTIC ACHIEVEMENTS	CONTENT	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
• Discussing about weather concerns when travelling. **READING** • Reading a map from another country to find out cities and places. • Reading about national agencies. • Reading about environmental issues to take into account to visit a foreign country.	• Giving and asking for directions. Attending business events. **Language** • You ´re interested in…you should… • If you like…. You should… • Types of transportation. • Learning about culture. • Types of restaurants • Talk about weather. • Sightseeing. • Day trips. • Tipping • Prices in dollars and cents. • I´ d like… I´ d prefer.	• Discuss with a partner about entertainment and leisure activities for a visitor in a foreign country. • Pretend your work for a broadcast company cand you are giving the weather report. **The students:** • Develop different reading skills interpreting information related to travelling	• Cultural aspects presented in each country while you are in a business travel.	**The students:** • Read a map from another country to find out cities and places. • Read about national agencies. • Read about environmental issues to take into account when visiting a foreign country. • Revise a business plan to propose to an international company.

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LINGUISTIC ACHIEVEMENTS	CONTENT	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
WRITING • Revising a business plan to propose to an international company. Developing writing skills in making, accepting or declining an offer.	• I´d like a single room. • I´d prefer a nonsmoking room. • Questions: How long How do I get to there? How will you be paying? How long will you be staying?	• Write a short note suggesting what someone might enjoy in Costa Rica and offering your help while in a business travel. Writing about severe weather conditions		Develop writing skills in making, accepting or declining an offer.

Subject area: English for Communication	Level: Twelfth
Unit 5: **Astounding Future Career**	Hours per unit: 20 hours
Cognitive target: Interprets and communicates information about: applying or transferring skills learned in one job situation to another.	

LINGUISTIC ACHIEVEMENTS	CONTENT	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
LISTENING • Listening to job interviews with a candidate for a major. • Listening to a discussion between two managers. **SPEAKING** • Discussing community problems and solutions by interviewing classmates.	**Functions** • Identifying career skills. • Attending to a job fair. • Participating in a job interview. • Defining the strengths and weaknesses. • Describing future plans. • Recognizing work standards. • Expressing emotions.	**The students:** • Identify how to interview appropriately. • Use sources of information about job opportunities such as job descriptions, job ads, and online searches about job market. • Respond appropriately to common personal information questions.	• Doing field work. • State goals for the immediate future. • Find problems in your community.	**The students:** • Listen to job interviews with a candidate for a major. • Listen to a discussion between two managers. • Discuss community problems and solutions by interviewing classmates. • Practice intonation when giving emotions.

LINGUISTIC ACHIEVEMENTS	CONTENT	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
• Practicing intonation when giving emotions. • Talking about life in a city and contrasting it with life in the country side. **READING** • Reading to improve skills to have a successful career advancement. • Comparing and contrasting the lives and goals of people regarding working conditions.	**Language** • Real conditionals present and future. • Present unreal conditional. • Future continuous. • Infinitives of purpose. • Infinitives that follow adjectives.	Role plays a conversation on how to relax before a job interview. **The students:** • Demonstrate the ability to apply or transfer skills learned in one job situation to another. • Read about careers and skills. • Read about how to have successful interviews.	• Exercise leadership. • Allocate time	• Talk about life in a city and contrasting it with life in the country side. **The students:** • Read to improve skills to have a successful career advancement. • Compare and contrast the lives and goals of people regarding working conditions.

LINGUISTIC ACHIEVEMENTS	CONTENT	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
WRITING • Developing consciousness about my skills, achievements and awards. • Organizing ideas to design an improvement plan to change in life.		• Read a resume from a job seeker. • Read an employer ´s campaign to improve work conditions. • Make notes about your skills, achievements and awards. • Write a resume for themselves. • Write about how employees feel at work based on field work. • Write a paragraph with your goals for the next five years.		• Develop consciousness about my skills, achievements and awards. • Organize ideas to design an improvement plan to change in life.

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ATTACHMENTS

EVIDENCE PORTFOLIO

MINISTRY OF PUBLIC EDUCATION
DEPARTAMENT OF TECHNICAL SPECIALTIES
TECHNICAL HIGH SCHOOL

PORTFOLIO OF EVIDENCE

Student:
Place and Date:

EVIDENCE PORTFOLIO

Technical High School:	
Program:	
Level:	TENTH GRADE_____ ELEVENTH GRADE_____ TWELFTH GRADE_____
Student's Name	
Date of Birth	
Address	
Telephone	
Email	
Full Names - Parents or Guardians	
Telephone - Parents or Guardians	

ACADEMIC HISTORY
• Primary School:
• High School:
• Courses Completed:

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