Journal of Al-Ma'rifa for Humanities
Journal homepage: http://jamh.uomosul.edu.iq
ISSN: (3006-8614) | E-ISSN: (3006-8622)

Designing an English Syllabus for Iraqi EFL Students of Medicine at the University of Mosul: Communicative Approach

Dr. Lateef Ahmed Mohammed Khaleefa[1*]
[1] **University of Mosul / College of Arts / Translation Department**

Received : 20 / 04 / 2025
Revised : 05 / 01 / 2026
Accepted : 11 / 01 / 2026
Available : 03 / 06 / 2026

Keywords:
designing,
syllabus communicative syllabus,
EFL students,
Medicine,
University of Mosul.

***Corresponding Author Email:**
latif.khaleefa@uomosul.edu.iq

ABSTRACT

Medical language occupies an essential position in human being's life. However, teaching medical language effectively is not an easy task, it requires adopting the most suitable teaching material and techniques through language learning in the class. So, learning how to spell and pronounce medical terms and how to use them appropriately in specific contexts is regarded as a crucial step for medical specialists. In this sense, this study attempts to design a practical syllabus based on the Communicative Language Teaching Approach for the first-year students of Medicine at the University of Mosul. The study targets (65) first-year students, (37) males and (28) females, from the College of Medicine at the University of Mosul. As for the data collection tools, a needs and identification analysis questionnaire and an observation method were adopted in the current research. The suggested lessons of syllabus are designed based on data collected from the needs and identification analysis and the observation. The study recommends implementing the syllabus designed on communicative approaches rather than structural ones in the language teaching process.

تصميم مقرر دراسي لغة انكليزية لطلبة كلية الطب العراقيين الدارسين للغة الانكليزية بوصفها لغة اجنبية في جامعة الموصل: المنهج التواصلي

د. لطيف أحمد محمد خليفة[(1)]

[(1)] جامعة الموصل/ كلية الآداب/ قسم اللغة الإنكليزية

الملخص

تتبوّأ اللغة الطبية مكانة سامية في حياة الإنسان. ومع ذلك، فإن تدريس اللغة الطبية بشكل فعال ليس مهمة سهلة، بل يتطلب اعتماد المواد التعليمية وتقنياتها المناسبة، من خلال تعليم اللغة في قاعات الدراسة. لذا، يُعَدّ تعلّم كيفية تهجئة المصطلحات الطبية ونطقها، فضلًا عن كيفية توظيفها بشكل مناسب في سياقات محددة خطوة حاسمة للتخصّصيين الطبيين. في هذا السياق، أقرّت هذه الدراسة تصميم منهج عملي يعتمد على أسلوب التعليم التواصلي لطلاب السنة الأولى في كلية الطب بجامعة الموصل. استهدفت الدراسة (65) طالبًا في السنة الأولى، بواقع (37) ذكرًا و(28) أنثى في الكلية المذكورة. أما بالنسبة لأدوات جمع البيانات، فقد اعتُمد استبيان تحليل الاحتياجات والتحديد وطريقة الملاحظة في البحث الحالي. وقد صُمِّمت الدروس المقترحة للمنهج بناءً على البيانات المحَصَّلة من تحليل الاحتياجات والملاحظة. توصي الدراسة بتطبيق المنهج المصمَّم على الأساليب التفاعلية، بدلاً من الأساليب الهيكلية في عملية تعليم اللغة.

الكلمات المفتاحية: تصميم، مقرر دراسي، منهج تواصلي، طلاب اللغة الإنجليزية، الطب، جامعة الموصل.

Introduction

English for Specific Purposes (referred to as ESP) emerged as a distinct field of linguistics in the 1980s, aimed at creating specialized and consistent academic training programs for professionals, along with related journals and global conferences, in contrast to English for General Purposes (EGP). Medical language occupies an essential position in human being's life. So, any misspelling and/or mispronunciation in a medical context may result in life-threatening cases. A miscommunication that comes from misspelling or mispronunciation in a medicine dosage may harm a patient and raise legal issues. However, medical specialists are considered favorable professionals when they receive effective and appropriate medical English, which consequently opens new horizons to them and offers various options of application in their field worldwide. So, students of Medicine have to enhance several competencies such as linguistic, sociolinguistic, and pragmatic through their medical course that is based on selecting appropriate diagnostic procedures, producing effective material, conducting a patient interview, and formulating a management plan, among others. Most importantly, any syllabus or course either in ESP and/or EGP should be designed by contemporary approaches that aim at boosting the learners' communicative and functional capacities of language rather than focusing on the pure structural aspects of language.

Designing an English course for medical students at the University of Mosul is the core of the present study. Using a set of concepts and principles from the communicative language teaching approach (henceforth, CLT) (Richard and Rodgers, 2001:153) and Integrative Teaching Strategies (henceforth, ITSs) (Betts & Kercher, 2023: 58). The main goal of the ESP domain is to cope with the needs and interests of the learners in the curriculum and/or syllabus. Basically, there is a shared claim that the ESP domain is successful to the extent that it is tailored to meet the needs and interests of specific students in specific settings (Hyland 2014: 3-5; Dou, 2024: 133-5). They (ibid) assert that the syllabus designer is thus

expected to analyze learners' needs and requirements to specify what particular language features and aspects should be taught. But, focusing on the quality and/or quantity of specificity required in a given course and whether it can be taught by language instructors or content instructors is to some extent debated (Also see: Hutchinson and Waters, 1987; Sukying et al., 2023: 401-3).

Furthermore, Widdowson (1983: 6) and Hyland & Jiang (2021:14) highlight that the field of English for Specific Purposes (ESP) is closely connected to achieving professional and educational objectives. They (ibid) also note that ESP focuses on particular skills required by learners in distinct contexts. Hutchinson and Waters (1987: 17) argue that ESP is a kind of practice that learners need to gain specific knowledge and/or competence to meet certain tasks. To put it simply, learners learn certain tasks to meet requirements and interests in a specific field of educational life through achieving professional and/or academic goals.

English for Medical Purposes

English for Medical Purposes (henceforth, EMP) is a concept that refers to teaching English to some specialists in medicine such as doctors, nurses, dentists, and others who work in the medical areas (Choi, 2021:1-2). EMP is a contextual and academic-specific language which is one of the areas in ESP designed to meet the learners' needs and interests in medical English language. The EMP courses should take into account the students' language wants necessities, and interests. Dudley-Evans, et al., (1998) maintain that EMP concentrates on the themes and topics of the medical fields. Basically, in language teaching approaches, Robinson (1991: 125) mentions that EMP classes do not focus on learning grammatical or structural rules, but rather rely on language learning that aims at social or career demands and needs.

EMP has become one of the significant fields in language learning that aims at allowing healthcare professionals to communicate effectively and accurately by seeking medical knowledge, developing patient-doctor communication, and

enhancing language competencies in medical situations (Piroozan, et al., 2016: 26; Choi, 2021:1-2). Moreover, Milosavljević (2008: 441) mentions that EMP is strengthened through many professional and academic research; and in some situations, EMP is highly instrumental which makes medical students learning English motivated and interested (Heming and Nandagopal, 2012, 485). So, ESP specifically EMP attracts medical students' attention who should be provided with well-organized medical syllabuses in terms of producing material, presenting activities, selecting teaching techniques, etc.) that meet the student's needs and interests in medicine (Barnau et al., 2018; Choi, 2021: 3). Furthermore, the syllabus of EMP reinforce the learners' skills to use the language for medical purposes like medical presentations, descriptions, reports.

To sum things up, for designing a well-organized and effective syllabus, Robinson (1991:7-10) proposes to conduct a needs and identification analysis (henceforth, NIA) for the students. NIA is regarded as a fundamental element of ESP courses since the objectives of ESP syllabuses are different from those in EGP ones. According to Doykova (2023: 4-5), EMP courses depend on certain approaches that are more likely than others to be adopted in teaching ESP specifically EMP classes such as task-based, content-based, problem-based learning, and communicative ones. Simply put, EMP courses emphasize how learners appropriately communicate and engage in the purpose of real-life situations inside the classroom. In medical syllabuses, students are more exposed to real hospital reports, charts, and medical equipment.

Statement of the Problem

In the domain of language teaching, one of the main roles of applied linguists is to enhance the teaching process by applying theories that improve language learners' skills. Thus, the present research attempts to find a suitable solution for first-year students of the College of Medicine, University of Mosul. Though they study medical language, they do not have an organized course or more systematic

language strategies in the classroom. In other words, the Iraqi Ministry of Higher Education adopted a new textbook entitled *Medical Terminology: A Short Course* by Chabner (2022) for first-year students of Medicine for the academic 2023-2024, but still this step presents a challenge for not only first-year students of Medicine but also for content and language instructors at the College of Medicine in teaching that textbook. It is a bulky book of 459 pages, which makes it difficult for instructors to cover all the materials in one course because it contains a lot of various drills and activities, which requires an accurate lecture schedule to cover all the material. Another challenge that content and/or language instructors face is the confusion in using appropriate teaching strategies in teaching medical language in the classroom. Accordingly, the research's attempt to overcome these challenges by modifying the textbook material through the selective strategy of the most important medical content and adopting appropriate teaching strategies specifically ITSs for teaching EMP, which is adequate for coping with the student's academic and occupational language needs and interests in the medical setting.

Research Hypotheses

It is hypothesized that the selective medical syllabus based on CLT and ITSs can boost learners' communicative competencies in medical language.

Aims and Objectives of Study

The present study aims to suggest an effective syllabus for undergraduate students of medicine at the University of Mosul. The suggested medical course is designed to develop undergraduate students' abilities by selecting suitable medical content and adopting suitable ITSs.

This EMP syllabus is designed for:

1. Developing students' four language skills (listening, speaking, reading, and writing).
2. Enhancing students' medical terms and expressions effectively and appropriately.
3. Developing students' simplified English grammar and pronunciation.
4. Improving students' critical thinking and intercultural awareness in medical situations.

Language of Medicine

This development of medical terminology creates new concepts and notions in the language; medical terms and expressions are wide and constantly changing. Though the language of medicine has become a lingua franca through the last decades, its idiomatic expressions, collocations, irregular forms, abbreviations, etc. have certain obstacles for students of medicine around the world.

According to Kujawska-Lis (2018: 83), the terminology of modern medical English has been shaped by several languages, including Greek, Latin, Latinized Greek, French, and Arabic. Turmezei (2012: 1) notes that 89% of anatomical terms in English are derived from Latin (65%) and Greek (24%). Furthermore, Džuganová (2019: 134-6) asserts that as much as 95% of English terminology originates from Latin and Latinized Greek vocabulary. Consequently, learners could not be able to comprehend English medical terminology without gaining knowledge of the Latin lexicon. He mentions that there is a distinct trend in medical language, reflecting a transition from the Latin and Greek origins of medical terminology to a predominance of English in the development of contemporary international medical terms. Wulff (2014: 88) notes that new medical terms are often created with elements from standard English; non-English speaking physicians have the option of either directly adopting these English

terms or translating them into their native language, such as in the cases of *bypass operation, screening*, and *scanning.*

Characteristics of Medical Language

Chabner (2011: 3-4) maintains that studying medical terminology is very similar to learning a new language. At first, the words seem strange and complicated, although they may stand for commonly known disorders and terms. For example, *cephalgia* means *headache* and *an ophthalmologist* is *an eye doctor*. The first step in the domain of medical language learning is to understand how to divide words into their parts. Logically, many terms, whether complex or simple, can be broken down into basic parts to be understood. For example, consider the following term, which is divided into three parts: *hematology* divided into *hamat-* , *-o-*, and *-logy* which stand for a root, a combing vowel, and a suffix respectively. The root is the *foundation of the word*. As for their meanings, the root *hemat-* means *blood*; the combining vowel *-o-* has no meaning of its own, it joins one word part to another; and the suffix *-ology* means *a process study*. Thus, the term hematology means the process of study of blood.

Doncu & Andronache (2014: 348) state that medical language includes one of the earliest specialized terms and expressions worldwide. From the linguistic perspective, specifically the lexicon, a large number of medical terminologies borrowed massively from Latin and Greek roots to form compound and derived words. Many medical terminology used for describing our medical care back to the early history; where, a large number of medical terms of parts of our bodies, illnesses, and medicine were used by ancient people. For example, the ancient Greeks thought of the disease we call *cancer* as something eating at a person on the inside, and so named the condition *karkinos*, which means both *crab* and *cancer*. Džuganová (2013: 61) maintains that doctors use everyday language vocabulary rather than learned expressions, e.g. *shingles* instead of *herpes; bleeding* instead of *hemorrhage, clotting* instead of *coagulation,* and so on.

Using nominalizations is another feature of scientific texts. It means focusing on nominal phrases rather than morphological and/or lexical ones. Taylor (2006: 24-26) asserts that scientific texts are generally characterized by the feature of nominalization of verbs and adjectives, e.g. "*Growing appreciation of the pro-inflammatory pathways and associated epidermal cytokine dysregulation that accompany various forms of psoriasiform dermatitis should foster more complete understanding of the endogenous and environmental factors that govern keratinocyte proliferation."*

As for the word-formation of medical terms, Džuganová (2013: 135) maintains that the formation of new terms of professional terminology is increasingly coined and it is constantly changing. Medical expressions are increasingly formed through three ways: forming new names; forming new meanings, and borrowing words from other languages. Firstly: morphologically as in compounds such as *(breastbone, endocardium, and gallbladder);* derivation such as (*appendicitis, endocarditis, adenoma)*; and acronyms and abbreviations such as *(AIDS, HIV, and CT)*. Second, syntactically: as in forming collocations such as *(typhoid fever, side effect*s). Third, semantically as in the metaphoric and metonymic transfer of the previous meaning: *medicine*- drug/medicament, *mad cow disease, avian flu*; Fourth, linguistically borrowings from other languages: e.g. French: *manchette, nurse, ointment, pain*; Italian: *influenza, malaria, pellagra, scarlatina;* Arabic: *alcohol, alchemy, alkali, elixir.* From another perspective, medical language is characterized by the irregular plural. Rollerová (2012: 99) mentions that irregular plural occurs both in standard English as in (*foot – feet; mouse – mice; goose – gees*) and in medical terms of Greek or Latin origin. In some medical terms, even doublets can occur, e.g. *uterus – uteri/uteruses; nucleus – nuclei; datum – data, bacterium – bacteria;* etc.

CLT-based Syllabus

A CLT-based approach is regarded as one of the current communicative approaches, and it is the turning point in the twentieth century in language teaching. CLT is extensively popular and welcomed all over the world. CLT backs to the British language teaching tradition in the late 1960s. American and British linguists regard it as an approach not a method (Richard and Rodgers, 2002: 154). Wilkins (1972) develops functional syllabuses that serve as communicative syllabuses in language teaching. Wilkins focuses on learners' understanding and expressing meaning in language communication rather than memorizing grammar rules and vocabulary. Lately, Wilkins (1976) proposed notional syllabuses that played a role play in developing the CLT approach. From another perspective, Richard and Rodgers (2002: 155) maintain that CLT has two main aims: first, to achieve communicative competence in language teaching. Second, to develop the language four skills to enhance interdependence between language and communication. Littlewood (1981, 1) points out the essential characteristic of CLT that concentrates on planning a systematic way to teach functions and structures of language.

Finoccohairo and Brumfit (1983: 91-93) and Johnson and Johnson (1998: 68-73) give accurate characteristics of the communicative approach. They state that meaning and contextualization are predominant in language teaching, and dialogues may be used but should be in communicative situations with focusing on functions. CLT focuses on effective communication, and reasonable authentic material is recommended in this approach. Furthermore, comprehensible pronunciation is sought and reading and writing may be used from the first lecture of the course. Basically, the main goal of this approach is communicative competence in which learners can use the target language effectively and appropriately by concentrating on sequencing of content, function, and meaning. The suggested CLT syllabus aims at creating motivated learners and it regards

fluency as the first primary goal, then accuracy is needed in context, and pair and group work is essential in in the language teaching process.

Regarding the learner's role in the CLT-based syllabus, medical learners are negotiators and communicators in the classroom they focus on language use rather than language forms. Breen and Candlin (1980: 110) illustrate the learner's role in CLT as a negotiator and acts as mutually dependent within the group or within the classroom activities. Language forms are not taken into account in CLT and classroom arrangement might not be standard in each lesson. The learner-centered and cooperative approaches are emphasized in CLT rather than teacher-centered and individualistic ones.

Richards and Rodgers (2002: 169) and Breen and Candlin (1980: 99) indicate that the instructor's responsibilities in Communicative Language Teaching (CLT) can be categorized into two primary roles: the first role involves facilitating communication among all participants and between the participants and the activities. The second role involves the instructor participating as an independent member in the learning and teaching process. Moreover, there are a number of minor roles. The instructor acts as an organizer of the teaching material, as a mentor of the procedures and activities in the classroom, and as a needs analyst, counselor, and group manager. (Littlewood 1981, Finocchiaro and Brumfit 1983).

Materials of CLT-Based syllabus have to be selected to serve communicative approaches. The essential role of materials is to boost students' communicative competence. Richards and Rodgers (2002:168) mention three types of material that can be adopted in CLT: text-based, task-based, and realia. Text-based materials are usually found in textbooks that serve communicative approaches. Text-based materials include activities and exercises such as dialogues, drills, visual cues, taped cues, and pictures, role-plays, pair-and-team-based activities (Richards and Rodgers, 2002: 169). As for realia, many advocates of CLT support using authentic materials rather than ready-made ones. In other words, materials

are taken from a real-life situation and authentic materials involve realia as magazines, advertisements, and newspapers. In addition, graphic and visual materials can be used in CLT as maps, pictures, symbols, graphs, and charts. Moreover, concrete things might be used in communicative exercises (Richards and Rodgers, 2002: 170).

The current suggested medical syllabus includes real-world healthcare images that include practical exercises that reflect the real role of a healthcare professional in medical institutions. This course helps medical students explore the revolutionary media materials of medicine that are rich with highly engaging and interactive activities that add a unique dimension to the learning process. It is regarded as one of the main essential points for enriching students' knowledge and interpersonal skills that empower their academic and career situations.

Accordingly, the experimental lessons do not create a passive reader. Instead, students will be challenged to listen, speak, write, watch, respond, examine, think, and make connections. The syllabus makes the students active participants in the learning process. It aims to facilitate the learner's mastery of the medical language through updated review exercises that give readers more practice with dividing and building medical words and delivering dynamic and interesting lectures through a comprehensive auditory and visual learning experience using PowerPoint presentations. Moreover, the majority of the images in this syllabus incorporate medical illustrations and photographs that include a diverse array of real people, instead of cartoon-like illustrations. The photographs are of real patients and real healthcare professionals in real healthcare settings. The syllabus includes review exercises that present real medical reports with related critical-thinking questions. Additionally, there are also exercises where you play the role of the healthcare professional in interpreting a patient's condition and rephrasing it as medical language.

It is worth mentioning that ITSs are one of the significant components in designing this suggested syllabus. ITSs (i.e. Integrative Teaching Strategies) aim

to involve learners in utilizing their prior knowledge and experiences to enhance their acquisition of new information and experiences. The principle suggests that students become responsible for their understanding, evolving into critical thinkers who can draw significant links between different subjects and apply their analytical skills to practical situations. ITSs emphasize dismantling barriers between traditional disciplines and connecting them while considering the system as a whole rather than individual components. Experiential learning enables students to grasp more than just memorizing and recalling information. They are more likely to enhance their language, mathematical, and reading skills by eliminating barriers between subjects and linking them. Integrative learning necessitates that students engage in projects that utilize real-world situations and problem-solving abilities. Incorporating a sense of social responsibility into the process equips students to be more active and effective contributors to society than a conventional curriculum (Vienni-Baptista & Hoffmann, 2024: 137-8).

According to what has been mentioned above and to meet the requirements of the principles of the suggested medical syllabus, a number of medical textbooks and dictionaries have been adopted. The researcher produces and develops medical content, exercises, and activities from Chabner (2013), Allan & Buchman (2011), Brooks et al. (2021), Fremgen & Frucht (2009), and Hull (2013), Willis (2006).

Methodology

The main goal of the current research is to design a communicative-based syllabus for first-year students of medicine by introducing a number of experimental lessons. The series of these lessons serves an essential dual purpose: firstly, to develop the learners' academic skills. Secondly, enhances the learner's occupational skills in the field of medicine. This can be achieved by mastering specific medical terms, using regular language structures, and enhancing their abilities to communicate appropriately in medical English. Basically, this

experimental course is delivered in the academic year 2024-2025. It is worth mentioning that this course is a collection of materials ITSs that have been selected carefully and precisely in order to meet medical learners' needs and interests.

Population and Sample

The study targets students of the College of Medicine at the University of Mosul, Mosul, Iraq. The sample consists of one experimental group. The group includes (65) subjects selected from 1st year classes during the academic year 2024-2025. (37) males and (28) females who are aged 21-22 years old. Educational level, age, sex, and background knowledge are taken into consideration through conducting the observation to make the respondents in order to control variables and get trusted results.

Data Collection Instruments

The NIA questionnaire is designed to analyze the EFL students' needs and interests in the College of Medicine (see Appendix 1). The observation method (Tight, 2022) is conducted to check how the lectures are delivered and how students interact. The observation method is "a data collection method in which a person (usually trained) observes subjects of phenomena and records information about characteristics of the phenomena" (Kumar & Sharma, 2023).

The NIA questionnaire consists of four main parts. The first part is concerned with the personal information of the subjects such as (gender, age, number of languages, and city residence). The second part is designed to analyze their language learning interests and context. Whereas the third part is devoted to examining the subjects' needs in the field of four language skills (reading, speaking, listening, and writing). The last part is designed to see what medical topics the subjects like to learn. The NIA questionnaire includes multiple-choice questions (MCQs), questions achieved by ticking one of the following options

(Yes, No, Do not Know), and some questions by ticking (rarely, sometimes, often, always, never), (see Appendix 1).

The second data collection instrument is observation. The research adopts the participant observation method, which is a type of naturalistic observation in which the researchers observe participants in their natural habitat. The data is collected by note-taking based on a list of statements (See Appendix 2). 10 observing sessions are conducted, with each session lasting one hour, during the second semester starting from 1st of March, 2025 to 15th April, 2025. The observation is conducted at the Department of Supporting Sciences/ College of Medicine/ University of Mosul.

Procedure

Before the distribution of the NIA questionnaire and observation, the (65) first-year subjects from the College of Medicine are informed of the purpose of the study. They are also requested to be patient in responding and filling out the questionnaire; and to be honest in expressing their real ideas and views. Certain procedures have been followed in the methodology of this study. The first step is conducting the NIA to (65) first-year medical subjects with a modified questionnaire to check their required need and interests (See Appendix 1). Second, conducting 6 observation sessions through a detailed-items form (see Appendix 3). The third step is most importantly, it is a syllabus design that is based on the results taken from NIA and observation sessions.

Results

Generally speaking, the results of the NIA that get more than 70% show that students' past English lessons were boring and had nothing to do with the students' reality did not give enough clues about life in English-speaking countries and included too much grammar. Students do not understand native speakers for they speak quickly and have problems with spelling, and punctuation.

Listening and speaking are my favorite language skills since they want to understand authentic talks. They believe that using genuine materials such as foreign films, TV and radio shows, and music, and structuring listening tasks around them is an effective method for improving listening skills. They appreciate having the opportunity to read comments on Facebook or various online discussion forums. Furthermore, students are eager to develop writing skills for applying for jobs overseas and to succeed in the writing section of an exam. There is a complete absence of speaking practice in the language classroom, and they desire to enhance their speaking abilities so that they can converse with their teachers and peers. The most prominent issues students encounter include shyness preventing many from speaking and a lack of vocabulary needed to discuss specific subjects. Regarding preferred topics for learning, they are interested in nearly all the subjects mentioned in the NIA questionnaire.

From another perspective, the results of the observation form show that language four skills are used in the class to teach medical content with audio-visual aids. There is interaction between students and their teacher and students are motivated by their teacher. However, this means negotiation and open discussion activities are not practiced. Students suffer from mispronouncing and misspelling of medical terminology. Fluency seems a problem for many students and there are no mini-presentations and pair/teamwork activities.

Discussion

The results of the NIA questionnaire and observation form show that the participants tend to learn medical language based on CLT concentrate on sequencing of content, function, and meaning; as well as, integrated skills, meaning, contextualization, scenarios, role-plays, functions, and notions, authentic material, comprehensible pronunciation, communicative competence, and pair and group work. Consequently, the suggested medical syllabus is designed according to the aforementioned characteristics of the CLT approach

(See Appendix 3). Since the hypothesis of this research says that the selective medical syllabus based on com CLT and ITSs can boost learners' communicative competencies in medical language, the suggested medical syllabus design is hopefully appropriate to meet the interests and needs of the first-year students of medicine.

Conclusion

The primary objective of this study is to propose a syllabus fot Iraqi EFL medical students at the University of Mosul. The main problem in the research is the overwhelmingly large amount of the prescribed curriculum or textbook. In this work, a need for better organization of exercises and a focus on the most important and beneficial topics for medical students has been achieved . Hopefully, this syllabus meets the students' professional and academic needs for they are based on scientific facts taken from NIA and observation forms, which address realistic issues of medical situations. Additionally, the syllabus takes into account all the principles upon which the course is designed.

Limitations

The present work includes (65) subjects, 37 males and 28 females from the Department of English, College of Medicine, University of Mosul, Iraq. Designing a syllabus based on CLT to teach English to first-year students. Two data collection instruments have been used: the NIA questionnaire and the observation form.

Recommendations

It is recommended to apply the suggested syllabus design based on CLT for teaching medical language next the accdemic year 2025-2026 for it is more applicable and acceptable than the prescribed one.

Suggestions for Further Studies

According to the results of the present research, another study is needed to implement the suggested syllabus for first-year students, at the College of Medicine, University of Mosul, in order to check to what extent the effectiveness of this suggested syllabus.

References

Allan, D., Lockyer, K., & Buchman, M. (2011). *Medical language for modern health care*. McGraw Hill.

Barnau, A., Džuganová, B., & Malinovská, N. (2018). *Effective English Language Teaching Through Videos: Theory and Praxis*. Hamburg: Verlag Dr. Kovač.

Betts, G. T., & Kercher, J. J. (2023). The autonomous learner model for the gifted & talented. In *Systems and models for developing programs for the gifted and talented* (pp. 49-103). Routledge.

Breen, M. P., & Candlin, C. N. (1980). The essentials of a communicative curriculum in language teaching. Applied linguistics, 1(2), 89-112.

Brooks, D. L., Levinsky, D., & Brooks, M. L. (2021). *Exploring Medical Language E-Book: A Student-Directed Approach*. Elsevier Health Sciences.

Chabner, D. E. (2011). *Medical language instant translator*. Elsevier Health Sciences.

Chabner, D. E. (2013). *Medical Language Instant Translator--E-Book: Medical Language Instant Translator--E-Book*. Sixth Edition, Elsevier Health Sciences.

Chabner, D. E. (2022). *Medical Terminology: A Short Course-E-Book: Medical Terminology: A Short Course-E-Book*. Elsevier Health Sciences.

Chabner, D. E. (2022). *Medical Terminology: A Short Course-E-Book: Medical Terminology: A Short Course-E-Book*. Elsevier Health Sciences.

Choi, L. J. (2021). Implementing English for Medical Purposes (EMP) in South Korea: Nursing students' ongoing needs analysis. *Nurse education today*, *104*, 104989, 1-6.

Cianflone, E. (2015). What Degree of Specificity for ESP Courses in EFL Contexts? A Preliminary Case Report for the Degree in Mediterranean food-and-wine Sciences and Health. *Scripta Manent*, *5*(1-2), 3-8.

Doncu, RE., Andronache, LF. (2014). *Greek and Latin nomenclatures in medical language.* 348-352.

Dou, A. (2024). Needs analysis of ESP courses from the perspective of students and teachers. *Frontiers in Educational Research*, *7*(6), 132-138.

Doykova, I. (2023). Developing English Language Skills for Professional Communication in Medicine. *Analele Universităţii Ovidius din Constanţa. Seria Filologie*, *34*(1), 3-18.

Dudley-Evans, T., St John, M. J., & Saint John, M. J. (1998). Developments in English for Specific Purposes: A Multi-Disciplinary Approach. Cambridge: Cambridge University Press.

Džuganová, B. (2013). English medical terminology -different ways of forming medical terms. *JAHR;* 4 (2013): 55-69.

Džuganová, B. (2019). Medical language- A unique linguistic phenomenon. *Jahr–European Journal of Bioethics*, *10*(1), 129-145.

Finochiaro, M., and C., Brumfit (1983). *The Functional-Notional Approach: From Theory to Practice.* New York: Oxford University Press.

Fremgen, B. F., & Frucht, S. S. (2009). *Medical Terminology: A living language*. Pearson Prentice Hall.

Heming, TA, and Nandagopal, S. (2012). Comparative difficulties with non‐scientific general vocabulary and scientific/medical terminology in English as a second language (ESL) medical students. *Sultan Qaboos University Medical Journal;* 12 (4): 485‐492.

Huckin, T. N. (2003). Specificity in LSP. Ibérica, Revista de la Asociación Europea de Lenguas para Fines Específicos, (5), 3-18.

Hull, M. (2013). *Medical language: Terminology in context*. FA Davis Company.

Hutchinson, T., & Waters, A. (1987). English for Specific Purposes. Cambridge, Cambridge university press.

Hyland, K. (2014). English for Academic Purposes. In Leung, C. & Street, B. (eds.) The Routledge Companion to English Studies. London: Routledge.

Hyland, K., & Jiang, F. K. (2021). Delivering relevance: The emergence of ESP as a discipline. *English for Specific Purposes, 64, 13-25.*

Johnson, K. and Johnson, H. (1998). Communicative Methodology. In K. Johnson and H. Johnson(eds.,) *Encyclopedic Dictionary of Applied Linguistics*. Oxford: Blackwell. 68-73.

Kujawska-Lis, E. (2018). Synonyms in Medical Terminology: Confusion for Inexperienced Translators. *Prace Językoznawcze*, *20*(1), 83-99.

Littlewood, W. (1981). *Communicative Language Teaching*. Cambridge: Cambridge University Press.

Milosavljevic, N. (2008). Interrelationship between learning English language and students' medical education. *Srp Arh Celok Lek*., Jul-Aug, 136(7-8), 441-444.

Mitrofanova, K. A., Andreyeva, A. V., Teleshev, V. A., & Blyakhman, F. A. (2018). Integration of English in Medical Informatics Course for Advanced Medical Education in Russia. In *Proceedings of the 12th International Multi-Conference on Society, Cybernetics and Informatics*.

O'Connor, P. J., & Cargill, M. (2006). Getting Research Published in English: Towards A Curriculum Design Model For Developing Skills and Enhancing Outcomes.

Piroozan, A., Boushehri, E., & Fazeli, R. (2016). A review of English for medical purposes for Iranian EFL learners. *Journal of Advances in English Language Teaching*, *4*(2), pp-24.

Piroozan, A., Boushehri, E., & Fazeli, R. (2016). A review of English for medical purposes for Iranian EFL learners. *Journal of Advances in English Language Teaching*, 4(2), 24–29.

Robinson. P (1991). ESP Today: A Practitioner's Guide. Hertfordshire: Prentice-Hall International Ltd.

Rollerová, A. (2012). Interdisciplinárne vzťahy vo výučbe odbornej medicínskej terminológie. In: *Lekárska a farmaceutická terminológia v teórii a praxi.* Martin: JLF UK 2012, 97-105.

Sukying, A., Supunya, N., & Phusawisot, P. (2023). ESP teachers: Insights, challenges, and needs in the EFL Context. *Theory and Practice in Language Studies*, *13*(2), 396-406.

Taylor, C. (2006). Which strategy for which text? Translation strategies for languages for special purposes. In: Gotti M, Šarčević, S. (Eds.) *Insights into Specialized Translation.* Bern: Peter Lang. 27-53.

Turmezei, T. D. (2012). The linguistic roots of Modern English anatomical terminology. *Clinical anatomy*, *25*(8), 1015-1022.

Vienni-Baptista, B., & Hoffmann, S. (2024). Integrative teaching and learning. In *Handbook of Interdisciplinary Teaching and Administration* (pp. 136-151). Edward Elgar Publishing.

Widdowson, H. G. (1983). Learning Purpose and Language Use. Oxford: Oxford University Press.

Wilkins, D. A. (1972). *The Linguistics and the Situational Content of the Common Core in a Unit/Credit System*. MS Strasbourg: Council of Europe.

Wilkins, D. A. (1976). *Notional Syllabuses*. Oxford: Oxford University Press.

Willis, M. C. (2006). *Medical terminology: The language of health care*. Lippincott Williams & Wilkins.

Wulff, H. R. (2004). The language of medicine. *Journal of the royal society of medicine*, *97*(4), 187-188.

Tight, M. (2022). Observation: A neglected data collection method in higher education research. In *Theory and Method in Higher Education Research* (pp. 149-162). Emerald Publishing Limited.

Kumar, A., & Sharma, A. (2023). Observation method: A review study. *Library Philosophy and Practice (e-Journal). https://digitalcommons. unl. edu/libphilprac*.

Appendix 1

A Sample of NIA Questionnaire

students in your class. This is given in our thesis entitled, "Oral vs.
Written Performance Task: Evaluation of Summative Assessments of the Students". We are conducting the survey among (Level of students) students in the (your school).

The survey would last only for 10-15 minutes and would be arranged at a time convenient to the student's schedule. All information provided will be kept in utmost confidentiality and will be used only for academic purposes. Your approval to conduct this study will be greatly appreciated. Thank you for your cooperation. Go

Dear Student,

The present questionnaire is part of a research about teaching English for medical purposes (EMP) entitled: "**Designing an English Syllabus for Iraqi EFL Students of Medicine at the University of Mosul**". This questionnaire aims to check your needs and interests in medical settings. So, you are kindly requested to fill in the questionnaire carefully and as much as possible. Your answers will be kept anonymous and confidential. Please complete this course evaluation by ticking in the square that corresponds to your opinion.

Part One: Background Information:

1. Gender: a. Male b. Female
2. Age: ----------
3. Languages: ----------
4. City Residence: ----------

Part Two: General statements

1. Please circle one of the following reasons for learning English at college.

a. Obligatory in the college curriculum

b. To get a language certificate

c. To be able to improve knowledge of English acquired in college

d. For no obvious reason

2. What are the main problems with the materials of English language lessons you have been studying since 2020? Please circle the options that apply to you.

a. Vocabulary too difficult to understand

b. Grammar too difficult to understand

c. Tasks are boring and have nothing to do with the students' reality

d. Don't give enough clues about life in English-speaking countries

e. Task instructions are too difficult to understand

3. What are the main problems in your English language class? Circle the options that apply to you.

a. Too many students in the class

b. Students not at the same level of language proficiency

c. No equipment available for English language teaching

d. Too many naughty students who disrupt the lesson

e. No books distributed by the Ministry of Education

f. Lack of interest in the lesson because English is considered less important than other subjects

Appendix 2

Observation Checklist

students in your class. This is in view of our thesis entitled, “Oral vs.

Written Performance Task: Evaluation of Summative Assessments of the Students”. We are conducting the survey among (Level of students) students in the (your school).

The survey would last only for 10-15 minutes and would be arranged at a time convenient to the student's schedule. All information provided will be kept in utmost confidentiality and will be used only for academic purposes. Your approval to conduct this study will be greatly appreciated. Thank you for your cooperation. Go

Location: Date: Time:

Item	*Never*	*rarely*	*sometimes*	*often*	*always*
1. Students are involved in meaning negotiation process rather than structures.					
2. Students take contextualization into consideration when they learn medical language.					
3. Students’ interaction is noticeable.					
4. Students use Comprehensible pronunciation of medical vocabulary.					
5. Peripheral drilling is used in the classroom.					
6. Listening focus					
7. Speaking focus					
8. Reading focus					
9. Writing focus					
10. Integrated language skills are adopted in learning medical language.					
11. Students are motivated by their teachers to use medical language in any way.					

Item	*Never*	*rarely*	*sometimes*	*often*	*always*
12. Fluency and acceptable language are the primary goals.					
13. Short presentations are used by students.					
14. Mini-practice and role-play activities are adopted.					
15. Team-work activities can be seen in the classroom.					
16. Pair-work activities are adopted.					
17. Teaching material is selected according to students' interests and needs.					
18. Solve problems and task activities.					
19. Focusing on medical content rather than language.					
20. Using audio-visual aids in learning medical language.					

Appendix 3
The Suggested Medical Syllabus

Unit One

1.1. The structure of medical terminology

Medical language is the framework on which the practice of medicine is built. Healthcare professionals use medical language every day to communicate with each other. Medical words are like puzzles, and their word parts are like the pieces. If you put the pieces together correctly, you can understand the meaning of the medical word.

Figure 1-1
This paramedic is using medical language to communicate with healthcare professionals in the emergency department to describe the condition of a patient in the ambulance. How important do you think it is for this paramedic to have a thorough, working knowledge of medical language?

1.2. Medical Language and Communication

Communication in any language consists of five language skills. These same skills apply to **medical language**. You need to master all five skills in order to communicate on the job with other healthcare professionals, (see Figure 1-2).

Figure 1-2 Medical language communication. These healthcare professionals are using all five medical language skills in order to communicate successfully.

1.3. Language Skills

1. **Reading** 2. **Listening**

These two skills involve receiving medical language. This is similar to input coming into a computer.

- You read medical words. Each Unit in this syllabus contains many medical words.
- You read actual medical reports in the Unit Exercises.
- You listen to your course instructor speak medical language.
- You listen to exercises with actual physicians speaking medical language from medical reports on the website.

Unit Three

3.1. Analyze and Define Medical Words

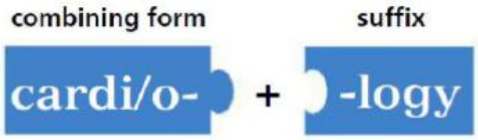
The third skill of medical language involves thinking, analyzing, and understanding. When you analyze something, you break it into smaller pieces that are easier to understand. To analyze a medical word, break it into its word parts. Then you combine the meanings of the word parts to give you the definition of the medical word. Here are the steps for analyzing and defining a medical word.

3.2. Medical Word with a Combining Form and Suffix

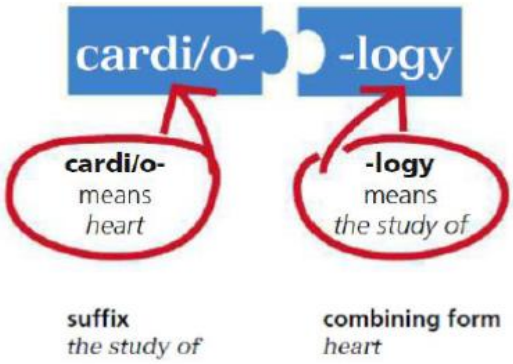
Let's say you read or hear this word and want to know its definition.

Cardiology

Step 1. Divide the medical word into its combining form and suffix. (Note: At this point in your study, you may not be able to look at a medical word and know that it contains a combining form and a suffix. However, as you memorize various word parts and their meanings, you will be able to do this.)



Step 2. Give the meaning of each word part



Cardiology: The study of (the) heart (and related structures)

Unit Four

The Body in Health and Disease

The human body is a marvelous, intricate creation that can be organized and studied in different ways. When functioning properly, the body operates in a state of health; when it fails, it experiences disease.

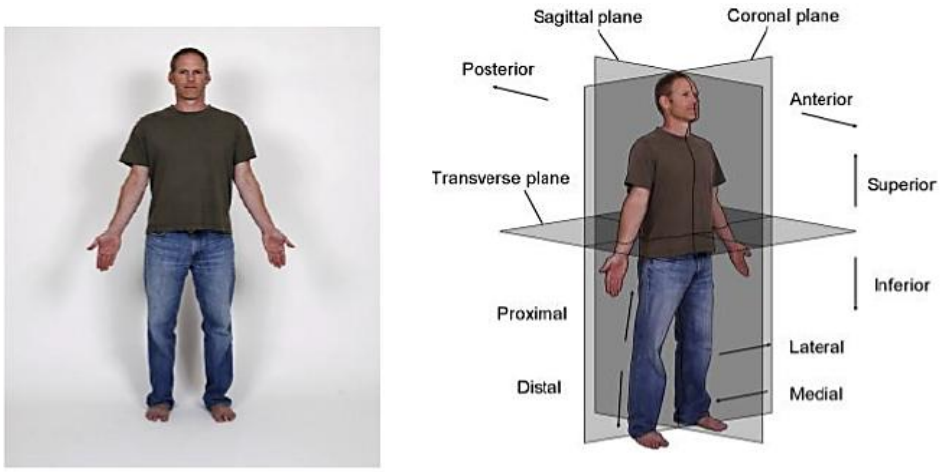


Figure 4-1 Human body in anatomical position.

Anatomical position is a standard position in which the body is standing erect, the head is up with the eyes looking forward, the arms are by the sides with the palms facing forward, and the legs are straight with the toes pointing forward.

The Body in Health

When the human body's countless parts function correctly, the body is in a state of **health**. The World Health Organization defines health as a state of complete physical, mental, and social well-being (and not just the absence of disease or infirmity). The healthy human body can be studied in several different ways. Each way approaches the body from a specific point of view and provides unique information by dividing or organizing the body in a logical way. These ways include: