

Republic of Yemen
Sana`a University
Faculty of Pharmacy



الجمهورية اليمنية
جامعة صنعاء
كلية الصيدلة

دليل التدريب الميداني

برنامج بكالوريوس العلوم الصيدلانية

Field Training Manual

Bachelor's of pharmaceutical Sciences program . (B. pharm)

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الإطار القانوني للدليل

- مادة (1) يسمى هذا الدليل (دليل التدريب الميداني) لطلبة بكالوريوس العلوم الصيدلانية في كلية الصيدلة - جامعة صنعاء
- مادة (2) يعتبر الدليل المرجعية الإرشادية لتنفيذ التدريب الميداني وأساس لتقييم الطلبة المتدربين
- مادة (3) يتولى عميد كلية الصيدلية - جامعة صنعاء ورئيس قسم الصيدلانيات الإشراف على تنفيذ التعليمات الواردة في هذا الدليل بالتنسيق مع اللجنة المشكلة للإشراف على التدريب الميداني للطلبة .

University Vision:

“The University of Sana’a aspires to the national leadership in teaching, learning, scientific research and community service, and to be among the best regional universities and the first house of expertise in Yemen.

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University Mission:

Contribute to sustainable development efforts by providing a higher education environment that achieves quality standards and outstanding research services in light of a fruitful national partnership, based on transparency, professionalism and creativity.

University Aims:

The university works to achieve the following goals:

- 1- Providing specialized and in-depth study opportunities for students in various fields of knowledge to meet the country's needs in terms of specializations, technicians and experts.
 - 2- Caring, teaching, developing, and generalizing the Arabic language as a scientific and educational language in the various fields of knowledge and science, as it is the cultural vessel for the meanings, values and ethics of Arab and Islamic civilization.
 - 3- Developing knowledge by conducting scientific research in various fields of knowledge, whether at the individual or group level, and directing it to serve the needs of society and development plans.
 - 4- Paying attention to developing "technology" technology, developing it and making use of it in developing the society.
 - 5- Encouraging the movement of authorship, translation and publishing in various fields of knowledge, with a special focus on the Yemeni heritage.
 - 6- Contributing to the promotion of arts and arts and the progress of sciences.
- Providing an academic environment conducive to freedom of thought, expression and publication in a manner that does not contradict Islam, its supreme values and ideals.
- 8- Strengthening ties with universities and public and private institutions in the country to ensure mutual and constructive interaction of knowledge, experiences, resources and participation that ensure effective contribution to bringing about comprehensive development in the country.
 - 9- Strengthening scientific and cultural ties with Arab and foreign universities, scientific organizations, and research and development centers in a way that helps the university develop and enhance its position.
 - 10- Providing technical and specialized studies and consultations for the various state agencies and their general and mixed institutions.
 - 11- Contributing to the development of policies and methods of work in state institutions and agencies in the public and private sectors, and providing innovative models and experiences to solve various problems.
 - 12- Raising the efficiency of workers in state institutions and agencies, the public and private sectors, by contributing to in-service preparation and qualification program

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Faculty Mission:

The College of Pharmacy seeks to prepare scientifically and practically qualified pharmaceutical graduates with high professional ethics and able to compete locally, regionally and globally in providing healthcare services through educational programs in accordance with quality standards that can support national pharmaceutical industries, market needs and serve community.

Faculty Aims:

- 1- Providing students with comprehensive knowledge about physiochemical properties and biological activities of medicinal substances required for formulating and preparing pharmaceutical products from their different sources, natural or synthetic.
- 2- Providing students with opportunities, practical skills, and training in different pharmaceutical sciences to ensure effective contribution in enhancing the requirements of pharmaceutical industries and labor market needs to serve the community.
- 3- Performing students the pharmaceuticals qualitative and quantitative analytical techniques according to GLP and GPMP guidelines to assess the quality and quantity of raw materials from natural or synthetic sources and different pharmaceutical products.
- 4- Possessing students the core knowledge concerning the principles of pathophysiology of diseases, pharmacotherapy, pharmacovigilance and pharmacoconomics to be able to participate with other health care professionals in improving health care services using evidence-based.
- 5- Planning, designing and conducting undergraduate and postgraduate research using appropriate methodologies.
- 6- Developing student's presentation, promotion, pharmaceutical marketing, administration, numeric and computation skills.
- 7- Demonstrating student's capability of communication skills, time management, critical thinking, problem-solving, decision-making and team-working.
- 8- Manage the safe and efficient distribution of medications and participate in quality assurance and improvement programs to maintain the sustainability of good practice.
- 9- Demonstrate a professional attitude through practicing in an ethical, legal manner and according to the GMP and GPP guidelines and continuously maintaining his/her competence through lifelong

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Program Mission:

To prepare graduates who are competent, professional and ethical in pharmaceutical manufacturing, offering and providing healthcare services in accordance with quality standards to provide the health-related needs of the society

Program Aims:

- 1- Providing students with comprehensive understanding in physiochemical properties and biological activities of medicinal substances by emphasizing the fundamental scientific principles in pharmaceutical and medical sciences.
- 2-Familiarizing the students with the principles of pharmacoeconomics and pharmaceutical marketing, pharmaceutical management, the legal requirements, and the ethical rules in the practice of pharmacy
- 3-Providing students with opportunities, practical skills, and training in different pharmaceutical sciences (pharmaceutical chemistry, pharmacognosy, pharmaceuticals, pharmacology, clinical pharmacy, and pharmacovigilance) as well as in pharmaceutical research to ensure effective contribution in healthcare needs of the society.
- 4-Equipping students with knowledge & skills necessary to meet the professional demands to participate effectively in healthcare provision at the patient's level and nationally.
- 5- Providing students with knowledge and professional practical skills, and training services in different pharmaceutical sciences that meet the requirements and aspirations of pharmaceutical industries and labor market needs to serve the community.
- 6- Developing the learning, information technology, communication and reflective skills that are necessary to enable students to undertake independent study, and to participate in lifelong learning.
- 7-Training students to think critically, communicate effectively and work in a team.

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The Graduate Attributes:

At the end of the program, the graduates will be able to:

- 1) Practice pharmacy with responsibility, accountability, in a professional and ethical manner, and according to the GMP, GSP, GPP and GLP.
- 2) Apply pharmaceutical technology principles in designing, preparing, identifying, isolating, and analyzing the raw materials, cosmetics and pharmaceutical products of natural and synthetic sources.
- 3) Apply pharmaceutical technology principles in preformulating, formulating and manufacturing pharmaceutical substances in suitable pharmaceutical dosage forms.
- 4) Procure, handle, and store chemicals and pharmaceutical products in pharmacies, hospitals, and wholesale stores.
- 5) Relate therapeutic uses, adverse reactions, and toxicities of pharmaceutical products to their physiochemical properties, pharmacokinetics, and pharmacodynamics.
- 6) Rationalize drug roles in disease treatment through understanding disease pathophysiology, signs, and symptoms, and in relation to patient-specific factors.
- 7) Provide evidence-based, patient-centered pharmaceutical care through professional evaluation of patient's drug-related needs and problems.
- 8) Monitor and dispense prescriptions, and provide information and advice necessary for safe & effective use of drugs.
- 9) Plan, design, conduct, and participate in collaborative educational programs to promote disease prevention and rational drug use.

Plan, design, conduct, and participate in collaborative research using appropriate methodologies and participate in R&D activities to support national pharmaceutical industries, market needs and serve community.

- 11) Demonstrate self-confidence, skills, and capabilities (such as effective communication, time management, critical thinking, problem solving and decision-making) necessary for effective contribution in teamwork.

12) Be a life-long learner for continuous improvement of professional knowledge & skills.

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المدونة الأخلاقية للصيدلة:

الصيدلة هم الممارسون الصحيون لمهنة الصيدلة ويحملون رسالة إنسانية لمساعدة المرضى والأطباء في الاستفادة المثلى من الأدوية بأمانة ومهنية تتبلور فيها المهارات العلمية والأخلاقية

يجب على الصيدلاني أن يعمل وفق الموجهات الأخلاقية التالية :

- A. التطبيق العملي للعلم الصيدلاني بدقة وتمكن وعناية
- B. الأمانة المهنية والتواصل الفعال مع المرضى والأطباء والمؤسسات الصحية المختلفة
- C. تقديم مصلحة المريض وجعلها فوق كل اعتبار
- D. العدالة في توزيع الموارد الصحية على المحتاجين
- E. الصيدلة مهنة ورسالة يؤديها الصيدلي لخدمة الفرد والمجتمع
- F. احترام خصوصية وكرامة كل مريض.
- G. احترام القوانين الطبية النافذة والتصرف بنزاهة إزاء الاستخدام السلبي للدواء والمستحضرات الطبية.
- H. احترام قيم وقدرات زملائه في القطاع الصحي والتعامل معهم بشفافية وأمانة



مقدمة عن التدريب الميداني

يعد التدريب الميداني للصيديلي ممارسة عملية وتجسيد منطقي للعلوم النظرية والتطبيقية التي تلاقها خلال فترة التحاقه بالبرنامج وإعداد ه مهنيًا لممارسة مهنة الصيدلة بكفاءة واقتدار، وإكسابه المهارات المهنية للمهنة ويتم التدريب الميداني بإشراف أعضاء من هيئة التدريس بالقسم يتم توزيعهم على الجامعات التي تنفذ التدريب الميداني في المستشفيات الحكومية والأهلية وصيدليات المستشفيات العامة والخاصة ومصانع وشركات الأدوية في نطاق سكن المتدرب.

ويعد التدريب الميداني حلقة مهمة لاستكمال متطلبات التخرج وضرورة أساسية لصقل مهارات الصيديلي ووقوفه على الواقع العملي لاكتشاف متطلباته وأخلاقته والمشكلات العملية المختلفة واكتساب الحلول الناجعة لها وإشراف وتقييم بنائي مباشر من أساتذة القسم.

أهداف التدريب الميداني:

- يسعى التدريب الميداني لطلبة الصيدلة العامة لتحقيق الأهداف التالية
- تنمية مهارات الطلبة في المجال العملي الصيدلاني
 - تطبيق المهارات النظرية التي تلقاها الطلبة وبلورتها في صورة عملية تطبيقية
 - تنمية الشعور بالمسؤولية لدى الطلبة أثناء ممارسة المهنة للصيدلة
 - تعزيز مهارات حل المشكلات والتواصل مع الآخرين بكفاءة ومهنية
 - إتاحة الفرصة للمؤسسات التي يتدرب فيها الطلبة لتقويم مخرجات البرنامج والمهارات المكتسبة.
 - الوقوف على المشكلات الشائعة في العمل الصيدلاني والعمل على حلها بكفاءة ومهنية.

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آليات تصميم وتنفيذ التدريب الميداني

أولاً : تصميم الدليل التنفيذي للتدريب الميداني :

تم تصميم الدليل التدريبي بناء على مرجعيات علمية وتجارب مختلفة من جامعات وكليات محلية وعربية وأجنبية وبلورتها في صورة إجرائية تطبيقية مع المقارنة بين مخرجات برامج التدريب تلك والاستفادة بشكل أساسي من التوجهات التدريبية المعاصرة والخبرات الأكاديمية والعلمية في هذا السياق مع تنفيذ المراجعة العلمية للدليل من فريق متخصص.

ثانياً: آليات التدريب الميداني

- يتم تنفيذ التدريب الميداني لطلبة الصيدلة وفق الإجراءات التالية:
- مراجعة الخطة الدراسية للبرنامج وتحديد الساعات التدريبية الفعلية من خلال الاطلاع على وثيقة البرنامج
 - إجراء مقارنات مرجعية مع برامج مناظرة
 - تشكيل لجنة أكاديمية من مجلس القسم والكلية المشرفة على البرنامج تشرف على رسم سياسات التدريب وإجراءات تنفيذه.
 - تقسيم الطلبة إلى مجاميع تدريبية وتعيين مشرفين لهم.
 - إبلاغ الطلبة بالفترة الزمنية للتدريب وإبلاغهم بمكان التدريب والمشرفين وعدد الساعات التدريبية وإجراءات التقييم
 - التنسيق مع جهات تنفيذ التدريب الميداني وصياغة مبادئ تمثل جوانب الاتفاق القانوني بين الطرفين وتحديد أماكن التدريب وساعاته وأيامه.
 - تعيين مشرف من قبل الجهة التي تم التعاقد معها لاستقبال الطلبة المتدربين.
 - بناء معايير تقييم وتقييم للمتدربين توزع للمشرفين لأكاديميين والمشرف المعين من الجهة لإجراء التقييم المستمر للمتدربين.

ثالثاً: توزيع الساعات التدريبية على مواقع التدريب

إجمالي الساعات التدريبية:

600 ساعة تدريبية موزعة على مرحلتين:

المرحلة الأولى: تدريب صيدلاني (1)

ويكون بعد انتهاء الطالب من دراسة المستوى الرابع الترم الثاني

- (300) ساعة تدريبية توزع على (5) ساعات في اليوم الواحد ولمدة خمسة أيام في الأسبوع وتستمر لمدة (12) أسبوعا.

المرحلة الثانية: تدريب صيدلاني (2)

تكون بعد انتهاء الطالب من دراسة المستوى الخامس الفصل الثاني

- (300) ساعة تدريبية موزعة على (5) ساعات في اليوم ولمدة (5) أيام في الأسبوع وبإجمالي (12) أسبوعا تدريبيا.

وتوزع هذه المرحلة التدريبية على المستشفيات التخصصية والصيدليات التابعة لها وعلى مصانع الأدوية

رابعاً: توزيع الطلبة

يتم توزيع الطلبة على مواقع التدريب من خلال:

- توزيع أماكن التدريب التي تم اختيارها والتعاقد معها على الطلبة ليتم اختيار الطالب /ة المكان المناسب له وبحسب الأعداد المحددة من الجهة التي سيتم التدريب فيها.
- تحديد المشرف الخارجي والداخلي لكل مجموعة
- النزول الميداني من قبل المجموعة والمشرف إلى موقع التدريب وتسليم الكشوفات الخاصة بالمجموعات واستمارات التقييم اليومية والأسبوعية والشهرية وسجلات التوقيع بالحضور والانصراف للمتدربين .

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خامسا: مسنوليات لجنة الإشراف الأكاديمي على التدريب

يتم تشكيل لجان الإشراف الأكاديمي على المجاميع التدريبية من قبل عمادة كلية العلوم الطبية ورئيس القسم وفقا للشروط التالية:

- ✓ يكون من حملة شهادة الدكتوراه في تخصص الصيدلة
- ✓ الخبرة العملية في الإشراف على التدريب الميداني
- ✓ وضع خطة تنفيذية للتدريب في ضوء الدليل
- ✓ مساعدة الطلبة وتذليل الصعوبات التي قد تواجههم وتعزيز جوانب القصور ومعالجتها أولا بأول
- ✓ عقد لقاءات دورية مع الطلبة اللذين يشرف عليهم
- ✓ توزيع استمارات التقييم واستخدامها بشكل دقيق ومتابعة المشرف اليومي الميداني واستلام التقارير اليومية منه والاحتفاظ بها في ملفات خاصة
- ✓ إجراء تحليل دوري لنتائج التقييم اليومي من قبل المشرف المقيم
- ✓ تنفيذ تقييم شهري لكل طالب

سادسا: مسنوليات وضوابط الطلبة المتدربين

- ✓ الالتزام بالزي الرسمي بصورة يومية
- ✓ توقيع الحضور والانصراف اليومي في السجل المخصص لذلك
- ✓ الالتزام بحضور الفترة الزمنية المحددة للتدريب
- ✓ احترام اللوائح والقوانين السارية في الجهة التي يتدرب فيها
- ✓ الحرص على الحفاظ على ممتلكات الجهة التي يتدرب فيها
- ✓ يتحمل الطالب المسؤولية في حالة التقصير في عمله التدريبي أو التسبب بأي أضرار تلحق بالجهة التي يتدرب فيها.

سابعاً: مسنوليات المشرف الميداني في الجهة التدريبية

- ✓ توزيع المتدربين على أماكن التدريب
- ✓ متابعة الحضور والانصراف بشكل يومي
- ✓ الإشراف المباشر على المتدربين من خلال الملاحظة الدقيقة
- ✓ تعبئة استمارة التقييم اليومي
- ✓ التواصل المستمر مع المشرف الأكاديمي وتزويده باستمارات المتابعة والتقييم بشكل أسبوعي وإيجاد الحلول للمشكلات الطارئة.
- ✓ تذليل الصعوبات التي تواجه المتدربين والرد على استفساراتهم
- ✓ الإشراف على تدوير المتدربين في عدة مواضع ومهام تدريبية

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إجراءات تقييم وتقويم الطلبة المتدربين ومعايير التقييم وطرقه

م	أنشطة ومحاو التقييم	نوع التقييم	التوقيت الزمني	الدرجة	النسبة
1	الاختبار التطبيقي- الشفهي- عرض تقديمي- مشروع عملي -واجبات وأنشطة- تقارير- ورش عمل	فردى- تعاونى	W1-w24	20	
2	الحضور والانضباط	فردى	W1-w24	20	
3	ملاحظة السلوك الأداى للمتدرب من المشرف	فردى	W1-24	20	
4	التقييم بالأقران	فردى - تعاونى	W3-12	10	
5	تقييم الاستعراض	فردى وجماعى	W6-15	10	
6	تقييم التقارير		W6-12	10	
7	اختبار شفوى		W5-24	10	
8	الإجمالى			100	

سياسات الغياب والانضباط:

- يمنح الطالب درجة التقييم الميدانى عند استكمال ساعات التدريب الميدانى بشكل كامل.
- فى حالة تغيب الطالب عن فترة التدريب لأكثر من 200 ساعة يحرم من الدرجة المستحقة على أن يستكمل فترة التدريب التى تغيب فيها
- عند حصول ظرف طارئ يحول دون استكمال فترة التدريب يتم التنسيق مع عمادة كلية العلوم الطبية لوضع الحلول العاجلة لاستمرار عملية التدريب
- لا يحق للطالب التغيب عن فترة التدريب الا لظرف قاهر فيما لا يتجاوز (25%) من فترة التدريب المحددة بعد التنسيق مع القسم والمشرف الأكاديمى وتقديم العذر الشرعى المقبول للنظر فيه مع تعويض فترة التغيب بوقت إضافى.
- كل متدرب أخل بعمله التدريبى الموكل إليه يتحمل كافة النتائج المترتبة على تقصيره أو إهماله

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إلغاء أو حرمان الطالب من التدريب الميداني:

تلغى فترة التدريب الميداني للطالب في الحالات التالية:

- إذا أبدى الطالب المتدرب قصورا كبيرا ومنظورا في أثناء ممارسته للتدريب يؤثر بشكل مباشر على أدائه ينوه من قبل المشرف الميداني والمشرف الأكاديمي لتجاوز القصور وبذل الجهد الإضافي وفي حالة تعذر تحسن أدائه يوقف عن التدريب ويحال للكلية والقسم المشرف عليه
- في حالة وجود شكاوى مستمرة عن سلوكه التدريبي ومهنيته ومخالفته لأنظمة ولوائح العمل في الجهة التي يتدرب فيها
- إذا تكررت فترة غيابه وانقطع عن التدريب دون عذر مقبول

إجراءات الإرشاد والدعم الأكاديمي :

- تنفيذ لقاءات دورية مع الطلبة المتدربين
- الرد على اتصالات وتساؤلات الطلبة فيما يتعلق بالتدريب
- حل المشكلات وتقديم الدعم النفسي للطلبة
- التشجيع المستمر للطلبة المتدربين
- إنشاء قروبات الدعم الأكاديمي بمواقع التواصل الاجتماعي خاصة بكل مجموعة مع مشرفهم الأكاديمي وأعضاء مجلس القسم والمشرف الميداني لتسهيل عملية التواصل.
- تنفيذ لقاءات التغذية الراجعة

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كراسة التدريب الميداني (الحركة اليومية للمتدرب)

اليوم التاريخ

DATE

DAY

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التوقيع

اسم المشرف

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إفادة تدريب ميداني من منشأة التدريب (1)

تفيد إدارة بأن المتدرب/ة

قد مارس التدريب العملي في

من تاريخ /...../ 202....م إلى: /...../ 202....م

بإجمالي ساعات تدريبية ()

وقد كان/ت في فترة تدريبه

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متمنين له دوام التوفيق

ختم وتوقيع جهة التدريب

المدير العام

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الموضوع / إرسالية تدريب ميداني

الإخوة صيدلية مستشفى /

تهديكم جامعة صنعاء - كلية الصيدلة أطيب تحياتها وتتمنى لكم التوفيق في مهامكم، وإشارة للموضوع أعلاه مرسل اليكم الطالب /
..... المستوى يرغب بالتدريب في
..... في مجال تخصصه، أملين منكم التعاون معه وتمكينه من ممارسة التدريب وفقا للنظام المعمول به لديكم .

كما نرجو افادتنا بعدد الساعات والفترة التي تدرّب بها في منشأتكم حسب نموذج افادة التدريب الميداني (1) المرفقة والمعتمدة كونها أساسية للتخرج

وتقبلوا خالص التحية

عميد الكلية

أ. د. أحمد محمد السباتي

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استمارة تقييم تدريب ميداني (تعباً من قبل المتدرب)

	اسم الطالب /
	جهة التدريب /
من	إلى
	فترة التدريب

نرجو تعبئة الاستمارة بدقة وحرص

م	عناصر التقييم	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
1	تم إطلاعي على دليل التدريب الميداني من قبل الكلية					
2	هناك تنوع في مجالات التدريب الميداني					
3	موقع التدريب ملائم لي بالنسبة لمقر سكني					
4	الجهة التي أتدرب فيها تبدي تعاوناً معي					
5	يتم تذليل الصعوبات التدريبية التي قد تواجهني من قبل مشرف التدريب					
6	تعمل قيادة الكلية على متابعتي بشكل مستمر					
7	تعد فترة التدريب كافية لاكتساب الخبرات التخصصية					
8	تطور أدائي أثناء التدريب بشكل مفيد					
9	يتم تقييم أدائي من قبل المشرف الميداني بشكل مستمر					
10	تحرص كليتي على متابعة تدريبي بشكل مستمر					
11	شعرت بالرضا عن أدائي العملي التدريبي					
12	تمكنت من ممارسة العمل التدريبي بشكل مناسب					

يرجاء ذكر أهم الإيجابيات أثناء التدريب:

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أهم السلبيات التي واجهتني أثناء التدريب:

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استمارة تقييم طالب متدرب من قبل المشرف الميداني

اسم الطالب	
مكان التدريب	
الفترة الزمنية للتدريب	
يوم وتاريخ الزيارة	

م	بند التقييم	جيد	متوسط	ضعيف	ملاحظات
المهارات والقدرات الشخصية					
1	يلتزم بالمظهر العام والزى الرسمي				
2	يتواصل بفاعلية مع الجمهور				
3	متمكن من العمل ضمن الفريق				
4	القدرة على تحمل ضغوط العمل				
5	امتلاك روح المبادرة والمسئولية				
المهارات العملية والأدائية التخصصية					
6	الحرص والمواظبة على أوقات التدريب				
7	الدقة في إنجاز المهام الموكلة				
8	امتلاك المعرفة التخصصية الكافية لتنفيذ المهمة				
9	متمكن من التعامل مع جميع أصناف الأدوية				
10	إتقان قراءة الوصفات الطبية بعناية				
11	متمكن من رصد ومتابعة الآثار الجانبية للدواء				
12	يجيد تقييم الحالة قبل صرف الدواء				
13	متمكن من تسيير المهام الإدارية الصيدلانية				
14	يجيد استخدام الحاسوب ونظم المعلومات الصيدلانية				
15	متمكن من المشاركة في تصميم خطط علاجية للمرضى بعناية				
16	يطبق أنظمة السلامة والأمن الدوائي				
17	مستوعب للأصناف الدوائية تجارياً وعلمياً				
18	يجيد التسويق الدوائي والإقناع العلمي				

اسم المشرف توقيعه

اسم المشرف توقيعه

ختم واعتماد جهة التدريب

ملاحظة العبارات (11-15) خاصة بالتقييم أثناء التدريب السريري

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نموذج طلب شهادة تدريب إلزامي

اسم المتدرب باللغة العربية

اسم المتدرب باللغة الإنجليزية

التخصص

الفترة التدريبية: من إلى

إجمالي ساعات التدريب

م	جهة التدريب	مركز التدريب	من	إلى	ملاحظات
1	صيدليات المستشفيات				
2	صيدليات المجتمع				
3	المصانع وشركات الأدوية				
4	مراكز الرعاية الطبية				
5					

التقييم النهائي	صيدليات المستشفيات	صيدليات المجتمع	المصانع وشركات الأدوية	مراكز الرعاية الطبية	المجموع
الفترة الزمنية والحضور					
ملاحظات					
المجموع					

تم تدقيق البيانات من واقع السجلات التقييمية وتوصي اللجنة ب:

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رأي لجنة الإشراف الأكاديمي على التدريب الميداني:

عميد الكلية

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افادة تدريب إلزامي (2)

تشهد كلية الصيدلة - جامعة صنعاء

بأن الطالب /ة

قد أدى فترة التدريب الإلزامي للفترة من إلى وبيجمالي
ساعات تدريبية (.....)

في المراكز التدريبية التالية:

..... و..... و.....

وقد اجتاز فترة التدريب الإلزامي بنجاح وبتقدير عام (.....)

رئيس لجنة الإشراف الأكاديمي

المشرف الميداني

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عميد الكلية

رئيس القسم المختص

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هذه الأفادة توجه من القسم المختص بالتدريب بالكلية إلى ادارة شؤون الطلاب بالكلية لاستكمال
وثائق التخرج

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Course Specification of Pharmacy Training I

I. Course Identification and General Information:						
1	Course Title	Pharmacy Training I				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Training	
					300	
4	Study level/ semester at which this course is offered:	four Level / 2 nd semester				
5	Pre –requisite (if any):	All courses of the first four years				
6	Co –requisite (if any):	None				
7	Program (s) in which the course is offered:	Bachelor degree of Pharmacy				
8	Language of teaching the course:	English				
9	Location of teaching the course:	The Community and Hospital Pharmacies				
10	Prepared by:	Dr. Tareq Al-Maqtari Reviewed by prof. Dr . Ahmed Mohamed sabati				
11	Date of approval:	2022				

II. Course description:

This course offers all the knowledge and experience to pharmacy students who want to work in community or hospital pharmacies as their future job.

III. Intended learning outcomes (ILOs) of the course:

At the end of this course, the students will be able to

1. Familiar with the requirements and conditions of the storage for pharmaceuticals in the pharmacy and the process of ordering, receiving, pricing and returning medication products from wholesalers.
2. Know factors that should drive the development of value-added pharmacy services
3. Correlate pharmaceutical, biomedical and clinical knowledge to patient care.
4. Properly, interpret the pharmaceutical and medical terms, abbreviations and symbols in pharmacy practice.
5. Retrieve drug information on key assigned concepts (brand/generic name, use, usual dosage form(s), route of administration, common adverse drug reactions, and major patient counseling points).
6. Select appropriate management strategy for patients in different medical situations.
7. Review a patient's medication profile to detect medication allergies, correct doses, duplicate medications, and important drug interactions.
8. Provide level-appropriate counseling to patients, physician and/or other caregivers including proper instructions for safe and effective use.
9. Prescribe OTC medications for an optimal therapy.
10. Use pharmacy systems and technology that improve patient safety, pharmacy inventory management, drug / product storage, and medication distribution.
11. Interact effectively with patients, the public and health care professionals; including communication, interpretation and presentation of pharmaceutical information and data using appropriate listening, verbal, nonverbal, and written communication skills.
12. Perform according to professional and moral ethical codes and approaches considering laws of human rights as well as legal and safety guidelines.
13. Improve the pharmacist thinking, decision making and improve his problem solving abilities.
14. Manage time effectively.

iv. Intended learning outcomes (ILOs) of the course:

(A) Knowledge and Understanding:

Alignment Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in:
Knowledge and Understanding.

Program Intended Learning Outcomes (Sub-PILOs) in: Knowledge and Understanding		Course Intended Learning Outcomes (CILOs) in: Knowledge and Understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	Recognize the requirements and conditions of the storage for pharmaceuticals in the pharmacy and the process of ordering, receiving, pricing and returning medication products from wholesalers	a1-	Familiar with the requirements and conditions of the storage for pharmaceuticals in the pharmacy and the process of ordering, receiving, pricing and returning medication products from wholesalers.
A2-		a2-	Know factors that should drive the development of value-added pharmacy services

Teaching And Assessment Methods For Achieving Learning Outcomes:

Alignment Learning Outcomes of Knowledge and Understanding to Teaching and Assessment Methods:

Course Intended Learning Outcomes (CILOs) in Knowledge and Understanding After participating in the course, students would be able to:		Teaching strategies/methods to be used	Methods of assessment
a1-	Familiar with the requirements and conditions of the storage for pharmaceuticals in the pharmacy and the process of ordering, receiving, pricing and returning medication	<ul style="list-style-type: none"> ▪ Practical Tutorials ▪ Direct Patient 	<ul style="list-style-type: none"> ✓ Objective Structured Practice Exam ✓ Oral Examinations

	products from wholesalers.	Contact <ul style="list-style-type: none"> ▪ Role Modeling ▪ Problem-based learning 	<ul style="list-style-type: none"> ✓ Final Written examinations ✓ Written Reports ✓ Practice Exam
a2-	Know factors that should drive the development of value-added pharmacy services	<ul style="list-style-type: none"> ▪ Computer- aided learning 	

(B) Intellectual Skills:

Alignment Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in: **Intellectual skills**

Program Intended Learning Outcomes (Sub- PILOs) in Intellectual skills		Course Intended Learning Outcomes (CILOs) of Intellectual Skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	Correlate the basic knowledge of drug information to the fundamentals of pharmacy practice in the community and/or hospital pharmacy setting.	b1-	Correlate pharmaceutical, biomedical and clinical knowledge to patient care.
B2-	Enhance the students' attitude, skills and knowledge to better prepare them to provide pharmaceutical care.	b2-	Properly, interpret the pharmaceutical and medical terms, abbreviations and symbols in pharmacy practice.
		b3-	Retrieve drug information on key assigned concepts (brand/generic name, use, usual dosage form(s), route of administration, common adverse drug reactions, and major patient counseling points).
		b4-	Select appropriate management strategy for patients in different medical situations.

Teaching And Assessment Methods For Achieving Learning Outcomes:

Alignment Learning Outcomes of Intellectual Skills to Teaching Methods and Assessment Methods:

Course Intended Learning Outcomes (CILOs) in Intellectual Skills. After participating in the course, students would be able to:		Teaching strategies/methods to be used.	Methods of assessment
b1-	Correlate pharmaceutical, biomedical and	<ul style="list-style-type: none"> ▪ Practical Tutorials 	<ul style="list-style-type: none"> ✓ Objective

	clinical knowledge to patient care.	<ul style="list-style-type: none"> ▪ Direct Patient Contact <ul style="list-style-type: none"> ▪ Role Modeling ▪ Problem-based learning ▪ Computer- aided learning 	<p>Structured Practice Exam</p> <ul style="list-style-type: none"> ✓ Oral Examinations ✓ Final Written examinations ✓ Written Reports ✓ Practice Exam
b2-	Properly, interpret the pharmaceutical and medical terms, abbreviations and symbols in pharmacy practice.		
b3-	Retrieve drug information on key assigned concepts (brand/generic name, use, usual dosage form(s), route of administration, common adverse drug reactions, and major patient counseling points).		
b4-	Select appropriate management strategy for patients in different medical situations.		



(C) Professional and Practical Skills.

Alignment Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in: **Professional and Practical Skills**

Program Intended Learning Outcomes (Sub- PILOs) in Professional and Practical Skills		Course Intended Learning Outcomes (CILOs) in Professional and Practical Skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	Use pharmacy systems and technology that improve patient safety, pharmacy inventory management, drug / product storage, and medication distribution.	c1-	Review a patient's medication profile to detect medication allergies, correct doses, duplicate medications, and important drug interactions.
C2-	Monitor the prescriptions and prescribe OTC medications for an optimal therapy.	c2-	Provide level-appropriate counseling to patients, physician and/or other caregivers including proper instructions for safe and effective use.
		c3-	Prescribe OTC medications for an optimal therapy.
		c4-	Use pharmacy systems and technology that improve patient safety, pharmacy inventory management, drug / product storage, and medication distribution.

Teaching And Assessment Methods For Achieving Learning Outcomes:

Alignment Learning Outcomes of Professional and Practical Skills to Teaching and Assessment Methods:

Course Intended Learning Outcomes (CILOs) in Professional and Practical Skills After participating in the course, students would be able to:		Teaching strategies/methods to be used	Methods of assessment
c1-	Review a patient's medication profile to detect medication allergies, correct doses, duplicate medications, and important drug interactions.	<ul style="list-style-type: none"> ▪ Practical Tutorials ▪ Direct Patient Contact ▪ Role Modeling ▪ Problem-based learning 	<ul style="list-style-type: none"> ✓ Objective Structured Practice Exam ✓ Oral Examinations ✓ Final Written examinations ✓ Written Reports
c2-	Provide level-appropriate counseling to patients, physician and/or other caregivers including proper instructions for safe and		

	effective use.	<ul style="list-style-type: none"> ▪ Computer- aided learning 	<ul style="list-style-type: none"> ✓ Practice Exam
c3-	Prescribe OTC medications for an optimal therapy.		
c4-	Use pharmacy systems and technology that improve patient safety, pharmacy inventory management, drug / product storage, and medication distribution.		

(D) General / Transferable skills .

Program Intended Learning Outcomes (PILOs) in General / Transferable skills

After completing this program, students would be able to:

D1-	Interact effectively with patients, the public and health care professionals; including communication, interpretation and presentation of pharmaceutical information and data using appropriate listening, verbal, nonverbal, and written communication skills.	d1-	Interact effectively with patients, the public and health care professionals; including communication, interpretation and presentation of pharmaceutical information and data using appropriate listening, verbal, nonverbal, and written communication skills.
D2-	Use computer and technology efficiently to collect, analyze and interpret information to gain knowledge	d2-	Perform according to professional and moral ethical codes and approaches considering laws of human rights as well as legal and safety guidelines.
D3-	Communicate effectively with a wide range of individuals a variety of means.	d3-	Improve the pharmacist thinking, decision making and improve his problem solving abilities.
		d4-	Manage time effectively.

Teaching And Assessment Methods For Achieving Learning Outcomes:

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods.

Course Intended Learning Outcomes (CILOs) in General and Transferable Skills		Teaching strategies/methods to be used.	Methods of assessment
After participating in the course, students would be able to:			
d1-	Interact effectively with patients, the public and health care professionals; including communication, interpretation and presentation of pharmaceutical information and data using appropriate listening, verbal, nonverbal, and written communication skills.	<ul style="list-style-type: none"> ▪ Practical Tutorials ▪ Direct Patient Contact ▪ Role Modeling ▪ Problem-based learning 	<ul style="list-style-type: none"> ✓ Objective Structured Practice Exam ✓ Oral Examinations ✓ Final Written

d2-	Perform according to professional and moral ethical codes and approaches considering laws of human rights as well as legal and safety guidelines.	▪ Computer- aided learning	examinations ✓ Written Reports ✓ Practice Exam
d3-	Improve the pharmacist thinking, decision making and improve his problem solving abilities.		
d4-	Manage time effectively.		

V. Course Contents:

No.	Units / Topics List	Learning Outcomes	Sub Topics List	Number of Weeks	Contact Hours
1.	Review of pharmacy communication skills:	a.1-a.2, b.1- b.2, b.4, c.1- c.4, d.1- d.4	➤ Model of communication, verbal and non-verbal communication, questioning skills, explaining skills, listening skills & counseling skills	1	25
2.	Review of drug store management and inventory control:	a.1-a.2, b.1- b.2, b.4, c.1- c.4, d.1- d.4	a). Organization of Drug store, types of materials stocked, storage conditions. b). Inventory control: a. Purchasing, b. Pricing, c. Outdated medications, d. Return to wholesaler e. Return to stock>Returns from patients, f. Recalls.	1	25
3.	Prescription process	a.1-a.2, b.1- b.2, b.4, c.1- c.4, d.1- d.4	Pharmacy workflow a. Receiving prescriptions b. Screening prescriptions c. Hand off to order entry Reviewing prescriptions a. Check allergies b. Clinical review/patient profile c. Check for correct drug, dose and route	1	25

			<p>Legal Standards</p> <p>a. Prescription requirements (written and oral)</p> <p>b. Refillsc. controlled substance dispensing/ security formsd. Filing/record keeping for prescriptions, invoices, etc</p>		
4.	Technology Systems in Pharmacy	a.1-a.2, b.1- b.2, b.4, c.1- c.4, d.1- d.4	➤ Electronic system in Pharmacy	1	25
5.	Drugs Used in Cardiovascular Diseases	a.1, b.1- b.2, b.4, c.1- c.4, d.1- d.4	➤ Drugs used in hypertension, ischemic heart diseases, heart failure, dysrhythmias, shock	1	25
6.	Drugs Used in Blood Diseases	a.1, b.1- b.2, b.4, c.1- c.4, d.1- d.4	➤ Drug used in thrombosis and bleeding, anemias, hyperlipidemia, peripheral vascular diseases	1	25
7.	Drugs Used to Manage fever, Pain and Inflammation	a.1, b.1- b.2, b.4, c.1- c.4, d.1- d.4	➤ Paracetamol, NSAIDs, glucocorticoids, disease modifying antirheumatic drugs,, methotrexate, anticytokines, colchicine, uricosuric agents and inhibitors of uric acid synthesis	1	25
8.	Drugs Used in Diseases of Central Nervous System:	a.1, b.1- b.2, b.4, c.1- c.4, d.1- d.4	➤ Drugs used in depression, psychosis, mania, bipolar disorder, ADHD, migraine, epilepsy,	1	25
9.	Drugs Used in Diseases of Central Nervous System:	a.1, b.1- b.2, b.4, c.1- c.4, d.1- d.4	➤ alzheimer and parkinson diseases, general and local anesthetics, sedatives, hypnotics, anxiolytics, opioid analgesics	1	25

10.	Drugs Used in Endocrine Diseases:	a.1, b.1- b.2, b.4, c.1- c.4, d.1- d.4	➤ Drugs used in diabetes mellitus, growth hormone disorders, infertility, osteoporosis, hypercalcemia, hyperprolactinemia ➤	1	25
11.	Drugs Used in Endocrine Diseases:	a.1, b.1- b.2, b.4, c.1- c.4, d.1- d.4	➤ , thyroid diseases ➤ <i>Oxytocin, vasopressin,</i> desmopressin, mineralocorticoids, estrogens, antiestrogens, progestins, antiprogestines, contraceptive drugs, androgens, antiandrogens and	1	25
12.	Drugs Used in Respiratory Diseases:	a.1, b.1- b.4, c.1- c.4, d.1- d.4	Drugs used in pharmacotherapy of bronchial asthma, chronic obstructive pulmonary diseases, allergic rhinitis and cough	1	25
Number of Weeks /and Units Per Semester					300

VI. Teaching strategies of the course:

1. Practical Tutorials (small group discussion)
2. Computer- based learning
3. Problem-based learning
4. Role Modeling
5. Direct Patient Contact

VII. Assignments:

Assignments	Aligned CILOs (symbols)	Week Due	Mark
Written Reports	a.1, b.1, b3-b.4, c.1-c.4, d.1, d.3	2 nd , 4 th , 6 th , 8 th , 10 th , 12 th , 14 th	10

VIII. Schedule of Assessment Tasks for Students during the Semester:

No.	Assessment Method	Aligned Course Learning Outcomes	Week Due	Mark	Proportion of Final Assessment
1.	Attendance, Participation and Activity	a.1-a.2, b.1- b.4, c.1- c.4, d.1- d.4	All Weeks	10	20%

2.	Written Reports	a.1, b.1, b3-b.4,c.1-c.4, d.1, d.3	2 nd , 4 th ,6 th , 8 th , 10 th , 12 th , 14 th	10	
3.	Oral Examinations	a.1-a.2, b.1-b.4, c.1-c.3, c.4, d.1- d.4	3 rd ,5 th ,7 th , 11 th , 15 th	10	10%
4.	Objective Structured Practice Exam	a.1, b.1-b.4, c.1- c.4, d.1- d.4	16 th	40	40%
5.	Final Written Examinations	a.1-a.2, b.1- b.4, c.1- c.3, d.3	16 th	30	30%
Total				100	100%

IX. Learning Resources:

1- Required Textbook (s) (maximum two).

1. James, E.F, Reynolds, Parfitt, K., 2007, Martindale, "The extra pharmacopeia", 31st edition, Royal Pharmaceutical Society, London.
2. Roger Walker, Cate Whittlesea, 2011, Clinical Pharmacy and Therapeutics,5th edition, Elsevier Health Sciences.

Latest editions of all the suggested books are recommended.

2- Essential References.

1. Remington's, The science and practice of pharmacy, 2000., Philadelphia college of pharmacy and science, 20th edition Philadelphia, USA,
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Latest editions of all the suggested books are recommended.

3- Electronic Materials and Web Sites *etc.*

websites:

1. www.fda.gov
2. <http://www.mhra.gov.uk/index.htm>
3. <http://jpet.aspetjournals.org>
4. <http://www.jpharmacol.com>
5. <http://www.sciencedirect.com>
6. <http://www.ncbi.nlm.nih.gov/pubmed>

X. Students' Support:	
Office Hours/week	Other Procedures (if any)
Two contact hours per week	None

XI. Facilities Required:	
1 - Accommodation:	<ul style="list-style-type: none"> - Well-equipped lecture halls with data show facilities, whiteboards, net connection, etc. - Well-equipped laboratories with all required equipment and reagents.
2 - Computing resources:	<ul style="list-style-type: none"> - Computer laboratory with internet facilities.

XII. Course Improvement Processes:	
1- Strategies for obtaining student feedback on effectiveness of teaching	
	<ul style="list-style-type: none"> ▪ Student-based assessment of the effectiveness of teaching using a questionnaire designed by the Quality Assurance Unit at the end of the semester. ▪ Meeting with students and faculty (once per semester).
2- Other strategies for evaluation of teaching by the instructor or by the department.	
	<ul style="list-style-type: none"> ▪ Assessment of the course syllabus and contents by the teachers using a questionnaire designed by the Quality Assurance Unit of the university at the end of the semester. ▪ Regular meeting and discussion of the course content between the Head of Department and the teaching staff of the course (for theory and practice).
3- Processes for improvement of teaching.	
	<ul style="list-style-type: none"> ▪ Revision of the course specification and its teaching strategies every three academic years after consideration of all issues raised by the teachers and/or students during regular meetings and discussions. ▪ Exploring any possible defects in the course that might be encountered by the teaching staff and their mitigation in subsequent improved versions of course specification.
4- Processes for verifying standards of students' achievement	
	<ul style="list-style-type: none"> ▪ Checking of a sample of students' work by an independent faculty member. ▪ Periodic exchange and check marking of a sample of students' assignments with a faculty member from another institution. ▪ Adoption of scoring rubrics to assess the students' achievement (both for ongoing or summative assessments).

	<ul style="list-style-type: none"> ▪ Regular follow-up of laboratory logbooks to assess the practical achievement of students.
5- Procedures for periodically reviewing of course effectiveness and planning for improvement	
	<ul style="list-style-type: none"> ▪ Student rating and feedback ▪ Peer rating and feedback ▪ Regular meeting of the Curriculum Committee of the faculty.
6- Course development plans	
	<ul style="list-style-type: none"> ▪ Conducting regular workshops for the staff for improving their course specification skills. ▪ Regular revision of course specification and syllabus items.

XIII. Course Policies: (including plagiarism, academic honesty, attendance etc)

The University Regulations on academic misconduct will be strictly enforced. Please refer to -----

1	<p>Class Attendance:</p> <p>- Attendance in all lectures and practical classes are required, except in very emergency circumstances, such as serious illness or death in the family with providing an acceptable documentation approved the university and forwarded by the chairman of the department. Otherwise the absence shall be considered unexcused.</p> <p>-In accordance with the university rules, if the percentage of student's absentness exceeds 25 % of the total lectures or practical classes, the student involved shall be disqualified in the final written and practical examination of the course and shall be deemed to have failed in the course.</p>
2	<p>Tardy:</p> <p>- Roll will be called in the very beginning of each lecture and practical class. Retardation for more than three weeks without a reasonable excursion, the student involved shall not be allowed to attend the class any longer and consequently shall be considered to be absent.</p>
3	<p>Exam Attendance/Punctuality:</p> <p>- It is incumbent on student to report at the examination hall for checking in and rolls calling at least 15 minutes before the commencement of examination.</p> <p>-A student is not allowed to submit answer booklet and leave the examination hall only on or after the passage of the have examination duration (equivalent to the first one hour after the commencement of the examination).</p> <p>-A student who comes late shall not be admitted to the examination hall, only within the first one hour of the examination. Attending after this time, the student will be considered to be missed in the examination and shall be deemed to have failed in the course.</p>

	<p>When a student misses the final examination due to a legitimate medical problems or death in the family, an acceptable documentation approved by the university medical unit for the excused absentness (hospitals medical reports along with discharge summaries or death certificate) must be provided no later than three weeks and consequently the student shall be disqualified in the examination but with the excused absentness.</p>
4	<p>Assignments & Projects:</p> <ul style="list-style-type: none"> - Micro-assignments and practical reports must be submitted for the assessment on or before the due date. If a student does not submit the micro-assignments or practical reports, the student shall be allotted zero marks which will affect the final assessment of the course. -The submission date extension will not be granted only by the consent of the faculty member concerned. In the case of late submission, the student must provide a reasonable explanation to the faculty member. <p>Otherwise 1% of the obtained marks will be subtracted for each late day, including weekends and holidays.</p>
5	<p>Cheating:</p> <ul style="list-style-type: none"> -If a student is found cheating in the final and med-term examinations and quizzes(copying from un authorized materials and anther students' work or allowing other students to copy from his/her own work), the student involved shall be disqualified in the examination and shall be deemed to have failed in the course and also suspended from examinations of two more courses. If a student if found engaging in any unauthorized communications (oral,sign,call,etc.), while the examination is in progress or in possessing of any authorized materials or electronic devices before the distribution of examination papers , the student involved shall be disqualified in the examination and shall be deemed to have failed the course.
6	<p>Plagiarism:</p> <ul style="list-style-type: none"> - Plagiarism is the presentation of any material (text, data or figures) from any other source in preparation of micro-assignments or practical reports without clear and adequate acknowledgement of the source. - Plagiarism is also the use or copy of other students' work (with, or without payment) to prepare all or part of undertaken micro-assignments or practical reports of work submitted for assessment. <p>All types of plagiarism in are unacceptable and are considered of honest practices. If a student is found using plagiarism in devoted micro-assignments or reports , the student involved shall be subjected to the same penalties as in the case of cheating as already mentioned in the sub-section (5) of the course policies.</p>
7	<p>Other policies:</p> <ul style="list-style-type: none"> - - Students must switch off their mobile phones, labtops, electronic devices etc. before entering lecture room or laboratory. If a student is found using these devices while the lecture or practical work is in progress, the student involved shall be expelled out of the class and shall be considered to be absent. Note that students can submit their micro-assignments or practical reports through the e-mail address of the faculty member concerned and should be prudent to keep Photostat or electronic copies of submitted works to guard against an accidental loss.

Republic of Yemen
 Ministry of Higher Education
 Sana`a University
 Faculty of Pharmacy



الجمهورية اليمنية
 وزارة التعليم العالي والبحث العلمي
 جامعة صنعاء
 كلية الصيدلة

Course Specification of Pharmacy Training II

V. Course Identification and General Information:					
1	Course Title	Pharmacy Training II			
2	Course Number & Code:				
3	Credit hours:	C.H			Total
		Th.	Pr.	Tr.	
					300
4	Study level/ semester at which this course is offered:	5 th Level / 2 nd semester			
5	Pre –requisite (if any):	Field Pharmacy Training I			
6	Co –requisite (if any):	None			
7	Program (s) in which the course is offered:	Bachelor degree of Pharmacy			
8	Language of teaching the course:	English			
9	Location of teaching the course:	The Community and Hospital Pharmacies			
10	Prepared by:	Dr. Tareq Al-Maqtari, Reviewed by prof. Dr . Ahmed Mohamed sabati			
11	Date of approval:	2022			

VI. Course description:

This course offers all the knowledge and experience to pharmacy students who want to work in community or hospital pharmacies as their future job.

VII. Intended learning outcomes (ILOs) of the course:

At the end of this course, the students will be able to

- 1- Familiar with the requirements and conditions of the storage for pharmaceuticals in the pharmacy and the process of ordering, receiving, pricing and returning medication products from wholesalers.
- 2- Know factors that should drive the development of value-added pharmacy services
- 3- Correlate pharmaceutical, biomedical and clinical knowledge to patient care.
- 4- Properly, interpret the pharmaceutical and medical terms, abbreviations and symbols in pharmacy practice.
- 5- Retrieve drug information on key assigned concepts (brand/generic name, use, usual dosage form(s), route of administration, common adverse drug reactions, and major patient counseling points).
- 6- Select appropriate management strategy for patients in different medical situations.
- 7- Review a patient's medication profile to detect medication allergies, correct doses, duplicate medications, and important drug interactions.
- 8- Provide level-appropriate counseling to patients, physician and/or other caregivers including proper instructions for safe and effective use.
- 9- Prescribe OTC medications for an optimal therapy.
- 10- Use pharmacy systems and technology that improve patient safety, pharmacy inventory management, drug / product storage, and medication distribution.
- 11- Interact effectively with patients, the public and health care professionals; including communication, interpretation and presentation of pharmaceutical information and data using appropriate listening, verbal, nonverbal, and written communication skills.
- 12- Perform according to professional and moral ethical codes and approaches considering laws of human rights as well as legal and safety guidelines.
- 13- Improve the pharmacist thinking, decision making and improve his problem solving abilities.
- 14- Manage time effectively.

15- Intended learning outcomes (ILOs) of the course:

(A) Knowledge and Understanding:

Alignment Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in:
Knowledge and Understanding.

Program Intended Learning Outcomes (Sub- PILOs) in: Knowledge and Understanding		Course Intended Learning Outcomes (CILOs) in: Knowledge and Understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	Recognize the requirements and conditions of the storage for pharmaceuticals in the pharmacy and the process of ordering, receiving, pricing and returning medication products from wholesalers	a1-	Familiar with the requirements and conditions of the storage for pharmaceuticals in the pharmacy and the process of ordering, receiving, pricing and returning medication products from wholesalers.
		a2-	Know factors that should drive the development of value-added pharmacy services

Teaching And Assessment Methods For Achieving Learning Outcomes:

Alignment Learning Outcomes of Knowledge and Understanding to Teaching and Assessment Methods:

Course Intended Learning Outcomes (CILOs) in Knowledge and Understanding After participating in the course, students would be able to:		Teaching strategies/methods to be used	Methods of assessment
a1-	Familiar with the requirements and conditions of the storage for pharmaceuticals in the pharmacy and the process of ordering, receiving, pricing and returning medication products from wholesalers.	<ul style="list-style-type: none"> ▪ Practical Tutorials ▪ Computer- aided learning 	<ul style="list-style-type: none"> ✓ Objective Structured Practice Exam ✓ Final Written Examinations ✓ Oral Examinations ✓ Written Reports

a2-	Know factors that should drive the development of value-added pharmacy services.		
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(B) Intellectual Skills:

Alignment Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in: **Intellectual skills**

Program Intended Learning Outcomes (Sub- PILOs) in Intellectual skills		Course Intended Learning Outcomes (CILOs) of Intellectual Skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	Correlate the basic knowledge of drug information to the fundamentals of pharmacy practice in the community and/or hospital pharmacy setting.	b1-	Correlate pharmaceutical, biomedical and clinical knowledge to patient care.
B2-	Enhance the students' attitude, skills and knowledge to better prepare them to provide pharmaceutical care.	b2-	Properly, interpret the pharmaceutical and medical terms, abbreviations and symbols in pharmacy practice.
		b3-	Retrieve drug information on key assigned concepts (brand/generic name, use, usual dosage form(s), route of administration, common adverse drug reactions, and major patient counseling points).
		b4-	Select appropriate management strategy for patients in different medical situations.

Teaching And Assessment Methods For Achieving Learning Outcomes:

Alignment Learning Outcomes of Intellectual Skills to Teaching Methods and Assessment Methods:

Course Intended Learning Outcomes (CILOs) in Intellectual Skills.		Teaching strategies/methods to be used.	Methods of assessment
After participating in the course, students would be able to:			
b1-	Correlate pharmaceutical, biomedical and clinical knowledge to patient care.	<ul style="list-style-type: none"> ▪ Practical Tutorials ▪ Problem-based learning ▪ Direct Patient Contact ▪ Role Modeling 	<ul style="list-style-type: none"> ✓ Objective Structured Practice Exam ✓ Written Reports ✓ Final Written Examinations ✓ Oral Examinations
b2-	Properly, interpret the pharmaceutical and medical terms, abbreviations and symbols in pharmacy practice.		
b3-	Retrieve drug information on key assigned concepts (brand/generic name, use, usual		

	dosage form(s), route of administration, common adverse drug reactions, and major patient counseling points).		
b4-	Select appropriate management strategy for patients in different medical situations.		

(C) Professional and Practical Skills.

Alignment Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in: Professional and Practical Skills

Program Intended Learning Outcomes (Sub-PILOs) in Professional and Practical Skills		Course Intended Learning Outcomes (CILOs) in Professional and Practical Skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	Use pharmacy systems and technology that improve patient safety, pharmacy inventory management, drug / product storage, and medication distribution.	c1-	Review a patient's medication profile to detect medication allergies, correct doses, duplicate medications, and important drug interactions.
C2-	Monitor the prescriptions and prescribe OTC medications for an optimal therapy.	c2-	Provide level-appropriate counseling to patients, physician and/or other caregivers including proper instructions for safe and effective use.
		c3-	Prescribe OTC medications for an optimal therapy.
		c4-	Use pharmacy systems and technology that improve patient safety, pharmacy inventory management, drug / product storage, and medication distribution.

Teaching And Assessment Methods For Achieving Learning Outcomes:

Alignment Learning Outcomes of Professional and Practical Skills to Teaching and Assessment Methods:

Course Intended Learning Outcomes (CILOs) in Professional and Practical Skills		Teaching strategies/methods to be used	Methods of assessment
After participating in the course, students would be able to:			
c1-	Review a patient's medication profile to detect medication	▪ Practical Tutorials	✓ Objective

	allergies, correct doses, duplicate medications, and important drug interactions.	<ul style="list-style-type: none"> ▪ Direct Patient Contact ▪ Problem-based learning 	Structured Practice Exam ✓ Oral Examinations ✓ Final Written examinations ✓ Written Reports
c2-	Provide level-appropriate counseling to patients, physician and/or other caregivers including proper instructions for safe and effective use.		
c3-	Prescribe OTC medications for an optimal therapy.		
c4-	Use pharmacy systems and technology that improve patient safety, pharmacy inventory management, drug / product storage, and medication distribution.		

(D) General / Transferable Skills:

Alignment Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in: **General and Transferable skills**

Program Intended Learning Outcomes (PILOs) in General / Transferable skills		Course Intended Learning Outcomes (CILOs) in General / Transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	Interact effectively with patients, the public and health care professionals; including communication, interpretation and presentation of pharmaceutical information and data using appropriate listening, verbal, nonverbal, and written communication skills.	d1-	Interact effectively with patients, the public and health care professionals; including communication, interpretation and presentation of pharmaceutical information and data using appropriate listening, verbal, nonverbal, and written communication skills.
D2-	Communicate effectively with a wide range of individuals using a variety of means.	d2-	Perform according to professional and moral ethical codes and approaches considering laws of human rights as well as legal and safety guidelines.
D3-	Use computer and technology efficiently to collect, analyze and interpret information to gain knowledge	d3-	Improve the pharmacist thinking, decision making and improve his problem solving abilities.
		d4-	Manage time effectively.

Teaching And Assessment Methods For Achieving Learning Outcomes:

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods.

Course Intended Learning Outcomes (CILOs) in General and Transferable Skills	Teaching strategies/methods to be used.	Methods of assessment
After participating in the course, students would be able to:		

d1-	Interact effectively with patients, the public and health care professionals; including communication, interpretation and presentation of pharmaceutical information and data using appropriate listening, verbal, nonverbal, and written communication skills.	<ul style="list-style-type: none"> ▪ Practical Tutorials ▪ Direct Patient Contact ▪ Role Modeling 	<ul style="list-style-type: none"> ✓ Objective Structured Practice Exam ✓ Oral Examinations ✓ Written Reports
d2-	Perform according to professional and moral ethical codes and approaches considering laws of human rights as well as legal and safety guidelines.		
d3-	Improve the pharmacist thinking, decision making and improve his problem solving abilities.		
d4-	Manage time effectively.		

VIII. Course Contents:					
No.	Units / Topics List	Learning Outcomes	Sub Topics List	Number of Weeks	Contact Hours
1.	Drugs Used in Gastrointestinal Diseases:	a.1 , b.1- b.4, c.1- c.4, d.1- d.4	Drugs used in pharmacotherapy peptic ulcer, GERD, flatulence, vomiting, diarrhea, constipation	1	25
2.	Drugs Used in Gastrointestinal Diseases:	a.1 , b.1- b.4, c.1- c.4, d.1- d.4	, hemorrhoids, visceral spasms, inflammatory bowel disease, gallstones, hepatic encephalopathy and esophageal varices	1	25
3.	Microbial Chemotherapy:	a.1 , b.1- b.4, c.1- c.4, d.1- d.4	Antibacterial drugs	1	25
			Antifungal and antiviral drugs	1	25
			Antiprotozoal drugs, anthelmintics, antiseptics and disinfectants	1	25
4.	Chemotherapy of Cancer	a.1, b.1- b.4, c.1- c.4, d.1- d.4	Alkylating agents, anti-metabolites, vinca alkaloids, cytotoxic antibiotics, hormonal agents, and others	1	25
5.	Immunologic Drugs	a.1, b.1- b.4, c.1- c.4, d.1-	Vaccines and Antibodies		

		d.4		1	25
6.	Fluids and Electrolytes	a.1, b.1- b.4, c.1- c.4, d.1- d.4	Blood Plasma, Protein Substrates, Plasma Protein Fractions, Energy Substrates, Plasma Expanders, Intravenous Replacement Solutions	1	25
7.	Miscellaneous Drugs	a.1, b.1- b.4, c.1- c.4, d.1- d.4	Ophthalmic, skin, dental preparations, drugs for obesity and erectile dysfunction, OTC drugs, diagnostic drugs	1	25
8.	Cosmetics	a.1, b.1- b.2, b.4, c.1- c.4, d.1- d.4	Different kinds of cosmetic substances	1	25
9.	Parapharmaceuticals, Home Diagnostics, and Medical Devices	a.1, b.1- b.2, b.4, c.1- c.4, d.1- d.4	Ambulatory aids, bathroom equipment, blood pressure monitors, heat and cold therapy, home diagnostic aids, hospital peds and accessories, incontinence products, orthopedic braces and surgical fittings, ostomy appliances and accessories, respiratory equipment, thermometers, urinary catheters	1	25
10.	Vitamins, Minerals and Dietary Supplements	a.1, b.1- b.4, c.1- c.4, d.1- d.4	Fat soluble vitamins and water soluble vitamins, drug-vitamin interactions, minerals, dietary supplements	1	25
Number of Weeks /and Units Per Semester					300

IX. Teaching strategies of the course:

- 1- Practical Tutorials (small group discussion)
- 2- Computer- based learning
 - 3- Problem-based learning
- 4- Role Modeling
 - 5- Direct Patient Contact

6- Assignments:			
Assignments	Aligned CILOs (symbols)	Week Due	Mark
Written Reports	a.1, b.1, b3-b.4,c.1-c.4, d.1, d.3	2 nd , 4 th , 6 th , 8 th , 10 th , 12 th , 14 th	10

IX. Schedule of Assessment Tasks for Students during the Semester:					
No.	Assessment Method	Aligned Course Learning Outcomes	Week Due	Mark	Proportion of Final Assessment
6.	Attendance, Participation and Activity	a.1-a.2, b.1- b.4, c.1- c.4, d.1- d.4	All Weeks	10	20%
7.	Written Reports	a.1, b.1, b3-b.4,c.1-c.4, d.1, d.3	2 nd , 4 th , 6 th , 8 th , 10 th , 12 th , 14 th	10	
8.	Oral Examinations	a.1-a.2, b.1-b.4, c.1-c.3, c.4, d.1- d.4	3 rd , 5 th , 7 th , 11 th , 15 th	10	10%
9.	Objective Structured Practice Exam	a.1, b.1-b.4, c.1- c.4, d.1- d.4	16 th	40	40%
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7. www.fda.gov
8. <http://www.mhra.gov.uk/index.htm>
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11. <http://www.sciencedirect.com>
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Two contact hours per week	None

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7- Other strategies for evaluation of teaching by the instructor or by the department.	
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3	<p>Exam Attendance/Punctuality:</p> <p>- It is incumbent on student to report at the examination hall for checking in and rolls calling at least 15 minutes before the commencement of examination.</p> <p>-A student is not allowed to submit answer booklet and leave the examination hall only on or after the passage of the have examination duration (equivalent to the first one hour after the commencement of the examination).</p> <p>-A student who comes late shall not be admitted to the examination hall, only within the first one hour of the examination. Attending after this time, the student will be considered to be missed in the examination and shall be deemed to have failed in the course.</p> <p>When a student misses the final examination due to a legitimate medical problems or death in the family, an acceptable documentation approved by the university medical unit for the excused absentness (hospitals medical reports along with discharge summaries or death certificate) must be provided no later than three weeks and consequently the student shall be disqualified in the examination but with the excused absentness.</p>
4	<p>Assignments & Projects:</p> <p>- Micro-assignments and practical reports must be submitted for the assessment on or before the due date. If a student does not submit the micro-assignments or practical reports, the student shall be allotted zero marks which will affect the final assessment of the course.</p> <p>-The submission date extension will not be granted only by the consent of the faculty member concerned. In the case of late submission, the student must provide a reasonable explanation to the faculty member.</p> <p>Otherwise 1% of the obtained marks will be subtracted for each late day, including weekends and holidays.</p>
5	<p>Cheating:</p> <p>-If a student is found cheating in the final and med-term examinations and quizzes(copying from un authorized materials and anther students' work or allowing other students to copy from his/her own work), the student involved shall be disqualified in the examination and shall be deemed to have failed in the course and also suspended from examinations of two more courses.</p> <p>If a student if found engaging in any unauthorized communications (oral, sign, call, etc.), while the examination is in progress or in possessing of any authorized materials or electronic devices before the distribution of examination papers, the student involved shall be disqualified in the examination and shall be deemed to have failed the course.</p>
6	<p>Plagiarism:</p> <p>- Plagiarism is the presentation of any material (text, data or figures) from any other source in preparation of micro-assignments or practical reports without clear and adequate acknowledgement of</p>

	<p>the source.</p> <ul style="list-style-type: none"> - Plagiarism is also the use or copy of other students' work (with, or without payment) to prepare all or part of undertaken micro-assignments or practical reports of work submitted for assessment. <p>All types of plagiarism in are unacceptable and are considered of honest practices. If a student is found using plagiarism in devoted micro-assignments or reports, the student involved shall be subjected to the same penalties as in the case of cheating as already mentioned in the sub-section (5) of the course policies.</p>
7	<p>Other policies:</p> <ul style="list-style-type: none"> - Students must switch off their mobile phones, labtops, electronic devices etc. before entering lecture room or laboratory. If a student is found using these devices while the lecture or practical work is in progress, the student involved shall be expelled out of the class and shall be considered to be absent. Note that students can submit their micro-assignments or practical reports through the e-mail address of the faculty member concerned and should be prudent to keep Photostat or electronic copies of submitted works to guard against an accidental loss.

