



خطة المساق الدراسي COURSE PLAN

FIRST: COURSE IDENTIFICATION

أولاً: تعريف المساق

College & Department		الكلية والقسم	
College	Medicine	الطب	الكلية
Department	Public Health and Community Medicine	الصحة العامة وطب المجتمع	القسم
Academic Year	5th	السنة الخامسة	السنة الدراسية
Academic Semester	First+Second	الأول + الثاني	الفصل الدراسي
Course details		تفاصيل المساق	
Course Title	Introduction to Clinical Research	مقدمه في البحث السريري	اسم المساق
Course Code	MD 523	MD 523	رمز المساق
Course Type	Theoretical and practical	نظري و عملي	نوع المساق
Credit Hours	Three hours	ثلاث ساعات	الساعات المعتمدة
Pre-requisite	None	لا يوجد	المطلب السابق
<input checked="" type="checkbox"/> وجاهي <input type="checkbox"/> الكتروني كامل <input type="checkbox"/> مدمج		آلية تدريس المساق	
Teaching Method	<input type="checkbox"/> Face-to-Face <input type="checkbox"/> Online <input checked="" type="checkbox"/> Blended		

Instructor Contact Information

المدرس

Name	Tariq N. Al-Shatanawi	طارق نايف الشطناوي	اسم المدرس
Office No.	---	---	رقم المكتب
Tel (Ext)	+962 5 3491111 (4609)	+962 5 3491111 (4609)	الرقم الداخلي
E-mail	talshatanawi@bau.edu.jo	talshatanawi@bau.edu.jo	البريد الإلكتروني
Office Hours	---	---	الساعات المكتبية

وقت المحاضرة Class Times	وقت البدء Start Time	وقت النهاية End Time	اليوم Day	المبنى Building	رقم القاعة Room No.
	3:00 PM	4:00 PM	Monday	---	---

Course Materials

مصادر المساق

Textbook

الكتاب المقرر

1. Beardsmore, C. (2013). How to do your research project: a guide for students in medicine and the health sciences. John Wiley & Sons.
2. *Epidemiology for Public Health Practice*, Robert H. Friis and Thomas A. Sellers. Fifth edition, 2013, Jones and Bartlett.

Course References, Readings and Learning Resources

المراجع والقراءات ومصادر تعلم المساق:



3. Daniel, W. (2005). *Biostatistics: A foundation for analysis in the health sciences*. New Jersey: New Jersey: John Wiley & Sons Inc.

SECOND: COURSE OVERVIEW/DESCRIPTION

ثانياً: معلومات المساق

Course description

وصف المساق

This course focuses on the organization of and writing a scientific research proposal. It covers tips and guidelines of writing all sections of scientific proposal and writing a clear and concise abstract and cover letter for submission. Students will receive feedback on their writing from a group of mentors. There will be a balance between group discussions, individual writing time and one-to-one work with experienced mentor. This course will begin with a general introduction about the research process and anatomy of scientific proposal and its sections. The introduction will be followed by tips and guidelines of writing a scientific proposal .

This course is designed to assist in the development of the skills needed to write and submit scientific research proposals. It demonstrates the steps involved in developing scientific proposals and focus primarily on the process of writing. The course will be presented in two segments :

Part (1) presents the guidelines on how to write effectively, concisely, and clearly in the first semester.

Part (2) takes the participants through the preparation of their actual scientific research proposals in the second semester under supervision of one of academic faculty staff.

The group project supervisor provides guidance and support to the students in identifying research questions, developing proposals, obtaining ethical approval, and ensuring compliance with regulations.

Course Objectives

أهداف المساق

By the end of this course, students should be able to

مع نهاية هذا المساق يجب أن يكون الطالب قادرًا على

CO1.	Understand the research process	الهدف 1:
CO2.	Comprehend the components of the scientific proposal	الهدف 2:
CO3.	Write a draft of a scientific proposal	الهدف 3:
CO4.	Respond effectively to discussion committee comments regarding research proposal	الهدف 4:

مخرجات التعلم المستهدفة للبرنامج

Program Intended Learning Outcomes (PILO):

Knowledge & understanding, Professional Skills, and Competences	PILO1	Show understanding of various human body systems in terms of structure, function, and regulation, and normal anatomical, biochemical, cellular, genetic, and molecular mechanisms in human body and their disruptions during disease status. (Knowledge)	م ب : 1
	PILO2	Collect history and perform physical examination and apply clinical knowledge and skills in disease diagnosis and management through rational planning in requesting necessary, updated, and accurate diagnostic procedures. (Skills)	م ب : 2
	PILO3	Demonstrate and apply sufficient knowledge of drugs and pharmacotherapy concepts for rational drug use in clinical: therapeutic and preventive settings. (Skills)	م ب : 3
	PILO4	Understand and apply the concepts and application of community and preventive medicine. (Skills)	م ب : 4
	PILO5	Build an efficient and healthy doctor-patient and doctor-community relationship. (Skills)	م ب : 5
	PILO6	Recognize and apply the basic concepts and principles in scientific research, emphasizing research ethics and the practice of evidence-based medicine. (Competencies)	م ب : 6
	PILO7	Appreciate and apply the principles of medical and sustainable professional development. (Competencies)	م ب : 7
	PILO8	Respect and adhere to ethical principles in all aspects of education, training, and work (Competencies)	م ب : 8

مخرجات التعلم المستهدفة للمساق

Course Intended Learning Outcomes (CILO)

في نهاية المساق بنجاح يجب أن يكتسب الطالب المخرجات التالية: في نهاية المساق بنجاح يجب أن يكتسب الطالب المخرجات التالية: في نهاية المساق بنجاح يجب أن يكتسب الطالب المخرجات التالية:

بيانات المخرجات

بيانات المخرجات

Knowledge & understanding Professional Skills Competences	CILO1	Describe the scientific method and its importance in medical research	م ب : 1
	CILO2	Explain the ethical considerations in conducting medical research	م ب : 2
	CILO3	Identify and differentiate between various types of medical research design	م ب : 3
	CILO4	Discuss the principles of statistical analysis in medical research	م ب : 4
	CILO5	Design and develop a research proposal	م ب : 5
	CILO6	Apply appropriate research methods to collect and analyze data	م ب : 6



	CILO7	Work independently and collaboratively on a research project	:7 م م	
	CILO8	Communicate research proposal effectively, both orally and in writing	:8 م م	
	CILO9	Practice responsible conduct of research, including ethical considerations	:9 م م	



Mapping Course Learning Outcomes CILOs to Program Learning Outcomes PILOs	موانمة مخرجات التعلم للمساق CILOs مع مخرجات التعلم للبرامج PILOs								
	Show understanding of various human body systems in terms of structure, function, and regulation, and normal anatomical, biochemical, cellular, genetic, and molecular mechanisms in human body and their disruptions during disease status.								
1. Describe the scientific method and its importance in medical research	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Explain the ethical considerations in conducting medical research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Identify and differentiate between various types of medical research design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Discuss the principles of statistical analysis in medical research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Design and develop a research proposal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Apply appropriate research methods to collect and analyze data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Work independently and collaboratively on a research project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Communicate research proposal effectively, both orally and in writing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Practice responsible conduct of research, including ethical considerations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Topic Outline/Schedule (Syllabus)

مخطط المساق (الموضوعات)

الأسبوع Week	مواضيع المساق / الفعاليات Course Topics/Events	القراءات (المراجع) Readings (Reference) رقم	عنوان المساق CLO	عنوان الكتاب PLO	أنشطة التدريس والتعلم Teaching & Learning Activity	العلامة Mark	الوقت / الموعود Duration/ Deadlines
1.	Introduction and understanding the steps of research process. Research groups	1-3	1.9	1, 3, 6, 7, 8	Power point material, Videos, and Worksheets	2-4	
2.	The argument matrix template to articulate the ideas of a manuscript	1-3	1.9	5, 7	Power point material, Videos, and Worksheets	2-4	
3.	Research problem (question) and objectives	1-3	1.9	5, 7	Power point material, Videos, and Worksheets	2-4	
4.	What to write in the 'Introduction' section and 'Literature review' Writing the References	1-3	1.9	5, 7	Power point material, Videos, and Worksheets	2-4	
5.	Guidelines for choosing and writing the 'Methods' section	1-3	1.9	5, 7	Power point material, Videos, and Worksheets	2-4	
6.	Population and Sampling methods and Sample size calculation and practical implementation	1-3	1.9	5, 7	Power point material, Videos, and Worksheets	2-4	
7.	Data collection and Study tools	1-3	1.9	5, 7	Power point material, Videos, and Worksheets	2-4	
8.	Choosing proper Statistical analysis method	1-3	1.9	5, 7	Power point material, Videos, and Worksheets	2-4	



الأسبوع Week	مواضيع المساق / الفعاليات Course Topics/Events	القراءات (المراجع) Readings (Reference) رقم	عن المسار CLO	عن برأة PLO	أنشطة التدريس والتعلم Teaching & Learning Activity	العلامة Mark	الوقت / الموعد Duration/ Deadlines
9.	Ethical issues and consideration Workplan/Timetable Budgeting and finance	1-3	1.9	5, 7	Power point material, Videos, and Worksheets	2-4	
10.	Writing the proposal abstract	1-3	1.9	5, 7	Power point material, Videos, and Worksheets	2-4	
11-14	MID Theory Exam					30	
Second semester	Formal research proposal discussion and evaluation by a committee after being approved by the supervisor and course coordinator.					70	

Week	May use the Week number more than once	الأسبوع من الممكن استخدام رقم الأسبوع أكثر من مرة
Course Topics/Events	The topic that is the focus of this part of the class in subjects' format	مواضيع المساق / المحتوى التعليمي المعطى في المحاضرة على شكل مواضيع الفعاليات
CLO	The learning objective of this specific topic; what you want the students to achieve.	مخرجات التعلم للمحاضرة الهدف التعليمي لهذا الموضوع المحدد؛ ما الذي تريد أن يحققه الطلاب.
Teaching & Learning Activity	Power point material, Videos, White board, overhead projector, handout, pc projector, written assignment, flip chart, objects used to illustrate something etc.	أنشطة التدريس والتعلم وسائل التعليم المستخدمة، مادة عرض مصورة، مقاطع مصورة، مجسمات السبورة البيضاء، جهاز عرض علوى، نشرة ، جهاز عرض كمبيوتر ، مهمة كتابية ، لوح ورقي ، أشياء مستخدمة لتوسيع شيء ما وما إلى ذلك.
Time	Duration of this part of the class.	الوقت مدة هذا الجزء النشاط من المحاضرة.
Mark	Mark weight for each topic as a part of total (100)	العلامة علامة كل مخرج وهي جزء من العلامة الكلية (100)

ASSESSMENT TOOLS		أساليب التقييم		
Write assessment tools that will be used to test students' ability to understand the course material and gain the skills and competencies stated in learning outcomes		أكتب أساليب التقييم التي سيتم استخدامها لتقييم قدرة الطلبة على استيعاب مواد المقرر واقتساب المهارات والكفايات المنصوص عليها في مخرجات التعلم		
وسيلة التقييم ASSESSMENT TOOLS	النوع (تكميني أو تجميعي) Type (Informative and Summative)	رمز مخرجات المساق المستهدفة CILO	العلامة Grade	النسبة % Percentage
(Participation) <input type="checkbox"/>	Informative		5	5%
(Report) <input type="checkbox"/>	Informative		5	5%
(Essays) <input type="checkbox"/>				
(assignments) <input type="checkbox"/>	Informative		10	10%
(Oral exams) <input type="checkbox"/>				
(Case study exams) <input type="checkbox"/>				
(Quizzes) <input type="checkbox"/>				
(Experiments) <input type="checkbox"/>				
(Project) <input type="checkbox"/>				
(Field Trip) <input type="checkbox"/>				
أخرى (يرجى التحديد) (specify) <input type="checkbox"/>				
(Mid Exam) <input type="checkbox"/>	Summative		30	30%
(Final Exam) <input type="checkbox"/>	Summative		50	50%
(TOTAL MARKS)	100			100%

التكيني	A set of formal and informal assessment procedures that teachers conduct during the learning process in order to modify teaching and learning activities to improve student achievement.	مجموعة من إجراءات التقييم الرسمية وغير الرسمية التي يجريها المعلمون أثناء عملية التعلم من أجل تعديل أنشطة التعليم والتعلم لتحسين تحصيل الطلاب.
التجمسي	A set of formal assessment procedures that teachers conduct after the learning process in order to measure student achievement.	مجموعة من إجراءات التقييم الرسمية التي يجريها المعلمون بعد عملية التعلم من أجل قياس تحصيل الطلاب.
وسيلة التقييم	Technique or method of evaluating information to determine how much a Student knows and whether this knowledge aligns with the intended learning outcomes of a theory or framework.	تقنية أو طريقة لتقدير المعلومات لتحديد مدى معرفة الطالب وما إذا كانت هذه المعرفة تتوافق مع نتائج التعلم لنظرية أو إطار عمل.



THIRD: COURSE POLICIES AND INSTRUCTIONS

ثالثاً: التعليمات والإرشادات

Attendance rules

الحضور والمواظبة

Attendance and participation are critical, and the regular university norms will apply. A student is not permitted to be absent for more than 15% of the total number of credit hours given to any course. Each class's attendance will be tracked. A 10% absence will result in a first written notice. If a student misses 15% of the class, the course is dropped, and the student is not entitled to sit for the final exam. If a student has any special circumstances (medical or personal), he or she is advised to discuss this with the instructor, and documented evidence will be requested to remove any absences from his or her attendance records.

يعتبر حضور الطلبة للمحاضرات ومشاركتهم بها في غاية الأهمية، وسيتم تطبيق القواعد المعمول بها في الجامعة بهذا الخصوص. يتم تسجيل حضور الطلبة في كل محاضرة. وصول نسبة غياب الطالب إلى 10% ستنسب في تلقيه إنذاراً أولياً خطياً. في حال وصول نسبة الغيابات إلى 15%， يتم حرمان الطالب من المساقة ولن يسمح للطالب بالتقدم لامتحان النهائي في المساقة. في حال تعرض الطالب إلى أي ظروف قاهرة (مرض أو ظروف شخصية)، يجر بالطالب التواصل مع المدرس ومناقشته هذا الظرف وإظهار دليل خطى يبرر الظرف ليتم الغاء الغياب من سجل الغياب.

GRADING SYSTEM

نظام التقديرات

التقدير Grade	النقط Points	المدى Range
A	أ	
A-	أ-	
B+	+ب	
B	ب	
B-	-ب	
C+	+ج	
C	ج	
C-	-ج	
D+	+د	
D	د	
D-	-د	
F	هـ	



Policies and instructions

السياسات والإرشادات

- Students must read and follow the internal bylaws of BAU in relation to student conduct bylaws.
- Students with special needs are highly recommended to register their cases with a valid doctor's report in the student affairs department.
- Students with special needs shall be subject to special care in coordination with the head of department as per internationally recognized and benchmarked considerations and services.
- The student must seek permission before making any interventions on the subject of the lecture.
- The student must listen to and respect the opinions of others.
- The student should not obstruct the course of the lecture.
- Students should not hesitate to ask questions to the instructor.
- Students should not use their mobile phones during the lecture.
- Students are strongly encouraged to contact their instructor if they have course-related questions during office hours.
- Students are recommended to contact their instructor using the LMS.
- Cheating and Plagiarism are prohibited.

- يجب على الطالب أن يقوم بقراءة واتباع اللوائح الداخلية الخاصة بجامعة البلقاء التطبيقية المتعلقة بلوائح سلوك الطلبة.
- ينصح الطلبة من ذوي الاحتياجات الخاصة أن يقوموا بتسجيل حالاتهم لدى شؤون الطلبة من خلال تقرير طبي حسب الأصول وساري المفعول.
- يخضع الطلبة من ذوي الاحتياجات الخاصة إلى رعاية خاصة وذلك بالتنسيق مع رئيس القسم وفقاً للمعايير الخاصة بذلك والمعرف بها دولياً على الطالب الاستماع قبل القيام بأي مداخلات على موضوع المحاضرة.
- على الطالب الاستماع واحترام الرأي الآخر.
- على الطالب عدم إعاقة سير المحاضرة.
- على الطالب عدم التردد في طرح الأسئلة على مدرس المادة والتواصل مع المدرس خلال الساعات المكتبية أو من خلال نظام التعليم الإلكتروني.
- على الطالب عدم استخدام الهاتف النقال أثناء المحاضرة.
- على الطالب عدم التردد في التواصل مع المدرس خلال الساعات المكتبية أو من خلال نظام التعليم الإلكتروني.
- غير مسموح الغش والاتصال على الاطلاق.

COURSE COORDINATOR

منسق المنسق

منسق المنسق Course Coordinator:	Tariq N. Al-Shatanawi	رئيس القسم Department Head:	
رقم قرار القسم Department Decision		تاريخ القرار: Date of Decision:	
التوقيع Signature:		التوقيع Signature:	
التاريخ Date:		التاريخ Date::	



Research Project for Medical students

General rules and regulations:

1. All official announcements related to research project course will be published through a Microsoft teams created for this purpose at the beginning of the course. It's the responsibility of each student to follow-up official announcements.
2. Each research group must contain 8-10 students only.
3. Each research group will be assigned to a professor supervisor.
4. On your application form, you are free to indicate one or more departments who you would prefer to work at. We shall try our best to assign you a supervisor who is compatible with your background if neither the supervisor you like nor the one specified is available. We don't require a detailed description of a research proposal in the application form. If your application is accepted, you and your supervisor will decide on a research project.
5. The agreed-upon title will be registered with the course academic committee as a "provisional working title" for the student's study once a research project has been agreed upon. During the course of the project, the tentative title may be changed to the "final title." It is the duty of the students to notify the course director and the course administrator in writing, together with the signature of their supervisor, of any changes to the title and subject of their project at any time throughout the project's term. Any provisional title that is not amended will automatically be given the status "final title."
6. The entire project must be meticulously planned, with enough time allotted for each step of the research process, including writing up. Students may be expected to meet with their supervisors frequently throughout the course of their work (the frequency of the meetings depends in part on the type of research project chosen) to get feedback and advice on the planning and execution of their research projects as well as to get feedback on the draft chapters of their research project.
7. External co-supervisor can be assigned to the research project upon formal approval.
8. It's the responsibility of each student to meet deadlines of the research project course.
9. Attendance and participation are extremely important, in this aspect the university rules will be applied. Attendance will be recorded by the instructor for each class. Maximum allowed absence is 15% of the course. The result of absentees is that the student will not be permitted to attend the final examination and he/she will be granted zero mark in that exam.
10. Scientific misconduct will be strictly monitored (scientific misconduct means falsification of data, fabrication of data, plagiarism, duplication, gift-authorship, ghost-authorship, or other practices that seriously deviate from those that are commonly accepted within the scientific community for proposing, conducting, or reporting research.)
11. Submission of the research manuscript to publication and providing a submission proof to a suitable journal is mandatory to pass the research project course.

Format of the research project

1. For fifth year students, follow the guideline for proposal writing.
2. For sixth year students, follow the guideline for manuscript writing.
3. The research project should not be longer than 5,000 words, as per our regulations (including tables, figure legends, and appendices, but excluding bibliography). It must be legible when printed on A4 paper, only using one side of the paper, in 12-point font, with two spaces between each line, and with margins that are at least 2 cm wide. The author's name, the research project's official title, and the degree for which it is being submitted should all be visible at the top of the title page. The supervisor's name should be on the page's bottom right corner. All copies that are submitted must at least be soft bound. Candidates need to be very careful to make sure the right version of the text displays.



4. Although it is anticipated that the majority of the research project will be devoted to the research actually carried out during the research time, the dissertation should include a literature survey that may be partially based on the written assignments. The way the dissertation is organized and how carefully it has been written and illustrated are both indicators of the candidate's ability and will be taken into account as such. Theses must be written in English, with the exception of citations (where appropriate) and recognized technical equations, and candidates are expected to have a reasonable mastery of the language. They should also use a spellchecker and carefully review their work before submission. Each candidate who submits a research project must identify the sources from which their information is derived, the extent to which they have used other people's work, and the parts of the research project that they claim to be their own original work, generally in a preface and specifically in notes or a bibliography. The page below the title page should contain the following statement of originality: "This research project complies with Al-Balqa Applied University BAU plagiarism policies and is largely my own work. When references to other studies have been made, they are noted in the text and bibliography."
5. Each piece of submitted work must be accompanied by a standard cover sheet that includes a signed declaration that the work is the student's own unaided effort and complies with the University's guidelines and regulations on plagiarism. This requirement was implemented in response to growing concerns about plagiarism in all University courses.

Submission of the research project

1. The research project submission deadline is announced at the beginning of the academics year, and any applicant who misses this date without the course directors' prior approval will often receive no credit for the research project and would fail the course as a whole. Only extraordinary circumstances may result in a request for a submission delay, and candidates are urged to keep in mind that technical difficulties with computers won't often be grounds for one. Any request to postpone submission must be addressed in writing to the course director well before the deadline, together with letters of support from the candidate's supervisor. Applications to postpone submission will only be taken into consideration if they are true emergencies, with the exception of those mentioned above.

Supervisor role

1. Help formulate an appropriate project proposal and outline of the project report
2. Meet regularly with students to support their research/project work. The supervisor would normally expect to meet with students for an average of one hour per week.
3. Inform students and the course director if students are not making satisfactory progress and/or require additional support.
4. Provide ongoing assessment of students' work throughout the period of supervision including advice on matters of presentation and style.
5. Supply written comments on students' submitted work when requested.