



MODULE DESCRIPTION

| Module Information | | | | | |
|------------------------------------|----------------------------------|-----------------------|---|------------------------------------|-------|
| معلومات المادة الدراسية | | | | | |
| Module Title | Principles pathological analysis | | Module Delivery | | |
| Module Type | Core | | <input checked="" type="checkbox"/> Theory <input type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input checked="" type="checkbox"/> Seminar | | |
| Module Code | Path-121 | | | | |
| ECTS Credits | 7 | | | | |
| SWL (hr/sem) | 175 | | | | |
| Module Level | | 2 | Semester of Delivery | | 2 |
| Administering Department | | pathological analyses | College | Science | |
| Module Leader | Dr.Mohammed A.Fayyadh | | e-mail | Mohammed.Amer.Fayyadh@sa-uc.edu.iq | |
| Module Leader’s Acad. Title | | Professor | Module Leader’s Qualification | | Ph.D. |
| Module Tutor | Name (if available) | | e-mail | E-mail | |
| Peer Reviewer Name | | Name/ | e-mail | E-mail | |
| Scientific Committee Approval Date | | 15/2/2025 | Version Number | 1.0 | |

| Relation with other Modules العلاقة مع المواد الدراسية الأخرى | | | |
|--|------|----------|---|
| Prerequisite module | | Semester | 2 |
| Co-requisites module | None | Semester | |

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

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| Module Aims أهداف المادة الدراسية | <ol style="list-style-type: none"> 1. To identify between tests according the samples type. 2. To understand of introduction for pathological analysis 3.To understand of complete blood count. 3. To understand of blood groups and Rh system 4.To understand of kidney function tests. 4. To understand of liver function tests. 5. Teach students how pathological analysis is integral to diagnosing diseases and informing treatment strategies in clinical practice. |
| Module Learning Outcomes مخرجات التعلم للمادة الدراسية | <ol style="list-style-type: none"> 1.Able to understand common aspects between different types of tests. 2.able to numerate the type of diabetes. <ol style="list-style-type: none"> 1. Able to describe the interactions between antibody and antigens. 2. Able to define medical conditions to relation with tests. 3. Able to identify of causes of disease with tests. 4. Able to understand of complications of diabetes. 5. Able to understand of functions of liver and kidney |
| Indicative Contents المحتويات الإرشادية | <p>Indicative content includes the following.</p> <p><u>1</u>-Liver function test ALB ,GOT,GPT,ALP,GGT,BLOOD UREA,creatinine, uric acid,electrolyte, lipid profile,c-reactive protein,cardiac function,pancreatic function,diabetes profile,thyroid function,reproductive hormones (30 hours)</p> <p>2- practical laboratory test areLiver function test ALB ,GOT,GPT,ALP,GGT,BLOOD UREA,creatinine, uric acid,electrolyte, lipid profile,c-reactive protein,cardiac function,pancreatic function,diabetes profile,thyroid function,reproductive hormones (30 hours)</p> <p>3-discusion (15 hours).</p> |

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

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| Strategies | The primary approach that will be used to present this module is to promote students engagement in the activities while also enhancing and broadening their critical thinking |
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| | abilities. This will be accomplished through lectures, interactive tutorials, and taking into account the kinds of easy experiments that include certain sampling tasks that the students will find engaging. |
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| Student Workload (SWL) | | | |
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| الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا | | | |
| Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل | 79 | Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا | 7 |
| Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل | 96 | Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا | 6 |
| Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل | 175 | | |

| Module Evaluation | | | | | |
|-----------------------|-----------------|-------------|------------------|------------|---------------------------|
| تقييم المادة الدراسية | | | | | |
| | | Time/Number | Weight (Marks) | Week Due | Relevant Learning Outcome |
| Formative assessment | Quizzes | 2 | 10% (10) | 5, 10 | LO #1, 2, 10 and 11 |
| | Assignments | 2 | 10% (10) | 2, 12 | LO # 3, 4, 6 and 7 |
| | Projects / Lab. | 1 | 10% (10) | Continuous | All |
| | Report | 1 | 10% (10) | 13 | LO # 10, 11 and 12 |
| Summative assessment | Midterm Exam | 2 hr | 10% (10) | 8 | LO # 1-7 |
| | Final Exam | 3hr | 50% (50) | 16 | All |
| Total assessment | | | 100% (100 Marks) | | |

| Delivery Plan (Weekly Syllabus) |
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المنهاج الاسبوعي النظري

| | Material Covered |
|----------------|---|
| Week 1 | Blood function & CBC |
| Week 2 | Liver function test ALB , GOT ,GPT |
| Week 3 | ALP |
| Week 4 | GGT |
| Week 5 | BLOOD UREA |
| Week 6 | Serum creatinine |
| Week 7 | Uric acid test & Serum electrolyte |
| Week 8 | Mid term exam |
| Week 9 | Lipid profile |
| Week 10 | C-reactive protein |
| Week 11 | Cardiac function test |
| Week 12 | Pancreatic function test |
| Week 13 | Diabetes profile |
| Week 14 | Thyroid function test |
| Week 15 | Reproductive hormones |
| Week 16 | Preparatory week before the final Exam |

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

| Week 1 | Lab :ALP,GOT GPT |
|---------------|-------------------------|
| Week 2 | Lab:ALP |
| Week 3 | Lab 3: GGT |
| Week 4 | Lab 4: ESR |
| Week 5 | Lab 5: blood urea |
| Week 6 | Lab 6: serum creatinine |
| Week 7 | Lab 7: Filters |
| Week 8 | Uric acid |
| Week 9 | Electrolyte profile |

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|----------------|-----------------------|
| Week 10 | Lipid profile |
| Week 11 | Prothrombin time |
| Week 12 | Cardiac function test |
| Week 13 | Diabetes profile |
| Week 14 | Thyroid function test |
| Week 15 | Reproductive hormones |

| Learning and Teaching Resources مصادر التعلم والتدريس | | |
|--|--|----------------------------------|
| | 1-Mosby's Manual of Diagnostic and Laboratory Tests) 5th Edition by Kathleen Deska Pagana PhD RN (Author), Timothy J. Pagana MD FACS (Author 2-Clinical biochemistry and Metabolic medicine (2012) 8th edition by Martin A.Crook | Available in the Library? |
| Required Texts | Laboratory and Diagnostic Tests A MANUAL OF NINTH EDITION Frances Talaska Fischbach, RN, BSN, MSN | no |
| Recommended Texts | | No |
| Websites | https://medlineplus.gov/laboratorytests.html | |

| Grading Scheme مخطط الدرجات | | | | |
|--|-------------------------|---------------------|-----------|---------------------------------------|
| Group | Grade | التقدير | Marks (%) | Definition |
| Success Group (50 - 100) | A - Excellent | امتياز | 90 - 100 | Outstanding Performance |
| | B - Very Good | جيد جدا | 80 - 89 | Above average with some errors |
| | C - Good | جيد | 70 - 79 | Sound work with notable errors |
| | D - Satisfactory | متوسط | 60 - 69 | Fair but with major shortcomings |
| | E - Sufficient | مقبول | 50 - 59 | Work meets minimum criteria |
| Fail Group (0 – 49) | FX – Fail | راسب (قيد المعالجة) | (45-49) | More work required but credit awarded |
| | F – Fail | راسب | (0-44) | Considerable amount of work required |
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Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.



العميد



رئيس القسم



استاذ المادة