

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation &  
Assessment**

**COURSE SPECIFICATION**

**Animal physiology-2, ZOO 454**

# Course Specification

Institution	<b>King Khalid University</b>
College/Department	<b>College of Science/ Department of Biological Sciences</b>
<b>A Course Identification and General Information</b>	
1. Course title and code:	<b>Animal physiology-2, ZOO 454</b>
2. Credit hours	<b>2h</b>
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs)	<b>College of Science, Department of Biology</b>
4. Name of faculty member responsible for the course	<b>Dr. Saad J. Alqahtani</b>
5. Level/year at which this course is offered	<b>7<sup>th</sup> level/ 4<sup>th</sup> year</b>
6. Pre-requisites for this course (if any)	<b>Animal physiology-1</b>
7. Co-requisites for this course (if any)	
8. Location if not on main campus	

## B Objectives

1. Summary of the main learning outcomes for students enrolled in the course.

**At the completion of this course, students will be able to:**

- 1. Understand the function of the endocrine organs, metabolism of their hormones, and their effects on the body.**
- 2. Explain mechanisms of how these hormones affect the homeostasis in the body.**
- 3. Discuss or write about clinical case studies or recent research related to the lectures of the course.**

2. Briefly describe any plans for developing and improving the course that are being implemented. (eg increased use of IT or web based reference material, changes in content as a result of new research in the field)

- 1. The course material in the form of Powerpoint presentations that could be accessed by the students enrolled in the course.**
- 2. Assignments, Quizzes, and any other material will be posted on an e. learning home page of the course.**

**C. Course Description** (Note: General description in the form to be used for the Bulletin or Handbook should be attached)

1.1 Topics to be Covered

List of Topics	No of Weeks	Contact hours
<b>Medical and Biological History of the Endocrinology</b>	<b>1</b>	<b>2</b>
<b>Hypothalamus (structure and function)</b>	<b>1</b>	<b>2</b>
<b>Pituitary gland: (structure and function)</b>	<b>1</b>	<b>2</b>
<b>Pituitary gland: (structure and function)</b>	<b>1</b>	<b>2</b>
<b>Thyroid gland: (structure and function)</b>	<b>1</b>	<b>2</b>
<b>Thyroid gland: (structure and function)</b>	<b>1</b>	<b>2</b>
<b>Para-thyroid gland: structure and function)</b>	<b>1</b>	<b>2</b>
<b>Internal secretions of Pancreas: (structure and function)</b>	<b>1</b>	<b>2</b>
<b>Adrenal Gland: (structure and function)</b>	<b>1</b>	<b>2</b>
<b>Thymus gland</b>	<b>1</b>	<b>2</b>
<b>Mucosal membrane in stomach and small intestine</b>	<b>1</b>	<b>2</b>
<b>Sex-glands: (structure and function)</b>	<b>1</b>	<b>2</b>
<b>Sex-glands: (structure and function)</b>	<b>1</b>	<b>2</b>
<b>Mechanisms of hormonal action and receptor functions</b>	<b>1</b>	<b>2</b>
<b>Hormones and metabolism</b>	<b>1</b>	<b>2</b>

Lecture: <b>30</b>	Tutorial: --	Practical/Field work/Internship: <b>0</b>	Other:
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3. Additional private study/learning hours expected for students per week. (This should be an average :for the semester not a specific requirement in each week)

NA

<p>4. Development of Learning Outcomes in Domains of Learning</p> <p>For each of the domains of learning shown below indicate:</p> <ul style="list-style-type: none"> <li>• A brief summary of the knowledge or skill the course is intended to develop;</li> <li>• A description of the teaching strategies to be used in the course to develop that knowledge or skill;</li> <li>• The methods of student assessment to be used in the course to evaluate learning outcomes in the domain concerned.</li> </ul>
<p><b>a. Knowledge</b></p>
<p>(i) Description of the knowledge to be acquired</p> <ol style="list-style-type: none"> <li><b>1. To describe the location and structure of endocrine glands.</b></li> <li><b>2. To explain the structural and functional relationships of endocrine glands.</b></li> <li><b>3. To identify the hormones produced by endocrine glands and specify their physiological effects.</b></li> <li><b>4. To describe the components of male and female reproductive system.</b></li> <li><b>5. To summarize the anatomical, physiological and hormonal aspects of reproductive system.</b></li> </ol>
<p>(ii) Teaching strategies to be used to develop that knowledge</p> <ul style="list-style-type: none"> <li>• <b>Lectures</b></li> <li>• <b>Multi-media, videos, animations.....etc.</b></li> <li>• <b>Discussion</b></li> </ul>
<p>(iii) Methods of assessment of knowledge acquire</p> <p><b>Two theoretical exams per semester accounts for 50% of final assessment. End of the semester examination with combination of different types of questions such as matching, multiple choice, and short essay accounts for other 50%.</b></p>
<p><b>b. Cognitive Skills</b></p>
<p>(i) Description of cognitive skills to be developed</p> <ol style="list-style-type: none"> <li><b>1-Develop the student skills in searching and getting information directly.</b></li> <li><b>2-Develop the student skills in using references</b></li> <li><b>3- Develop the student skills in writing scientific reports</b></li> </ol>
<p>(ii) Teaching strategies to be used to develop these cognitive skills</p> <ul style="list-style-type: none"> <li>• <b>Scientific Reports</b></li> <li>• <b>Assignments</b></li> </ul>
<p>(iii) Methods of assessment of students cognitive skills</p> <ol style="list-style-type: none"> <li><b>1. In class MCQ's Quizes</b></li> <li><b>2. Discussion of Scientific Reports</b></li> </ol>
<p><b>c. Interpersonal Skills and Responsibility</b></p>
<p>(i) Description of the interpersonal skills and capacity to carry responsibility to be developed</p> <ol style="list-style-type: none"> <li><b>1. Work independently and as a team work</b></li> <li><b>2. Manage recourses, time and other members of the group</b></li> <li><b>3. Communicate results of work with others</b></li> </ol>
<p>(ii) Teaching strategies to be used to develop these skills and abilities</p> <p><b>Oral communications with the students</b></p>
<p>(iii) Methods of assessment of students interpersonal skills and capacity to carry responsibility</p> <p><b>Writing short essays in certain topic related to the course</b></p>

<b>d. Communication, Information Technology and Numerical Skills</b>
(i) Description of the skills to be developed in this domain. <b>Use of computer programs</b>
(ii) Teaching strategies to be used to develop these skills <b>Using computer programs in the course requirements</b> <b>Using microscopes and other tools for practical training</b>
(iii) Methods of assessment of students numerical and communication skills <b>1. In class MCQ's Quizes</b> <b>2. Practical and theoretical exams</b> <b>3. Oral discussion</b>
<b>e. Psychomotor Skills (if applicable)</b>
(i) Description of the psychomotor skills to be developed and the level of performance required <b>Not applicable</b>
(ii) Teaching strategies to be used to develop these skills <b>Not applicable</b>
(iii) Methods of assessment of students psychomotor skills <b>Not applicable</b>

<b>5. Schedule of Assessment Tasks for Students During the Semester</b>			
Assessment	Assessment task (eg. essay, test, group project, examination etc.)	Week due	Proportion of Final Assessment
1	<b>Theoretical First Exam</b>	<b>6</b>	<b>20%</b>
2	<b>Second Exam</b>	<b>12</b>	<b>25%</b>
3	<b>Reports and discussion</b>	<b>weekly</b>	<b>5%</b>
4	<b>Theoretical Final Exam</b>	<b>16</b>	<b>50%</b>

#### **D. Student Support**

1. Arrangements for availability of teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

**10 Office hours / week**

#### **E Learning Resources**

1. Required Text(s)

**Endocrinology (Arabic)- Dr. Medhat H.K. Mohamad**  
**General physiology (Arabic)- Dr. Mohammed S. Khaleifa**  
**Physiology (Arabic)- Dr. Sabah N. Al Ology**

2. Essential References <ul style="list-style-type: none"> <li>• <b>Endocrinology books in the university central library</b></li> </ul>
3- Recommended Books and Reference Material (Journals, Reports, etc) (Attach List)
4-.Electronic Materials, Web Sites etc <b>Websites on the internet that are relevant to the topics of the course</b>
5- Other learning material such as computer-based programs/CD, professional standards/regulations <b>Many animations that show the functions of different hormones</b>

## F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (ie number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Lecture rooms, laboratories, etc.) <p style="text-align: center;"><b>50 seats/ class room</b>  <b>Computer access with data show and internet</b></p>
2. Computing resources <p style="text-align: center;"><b>Computer room containing about 15 computers</b></p>
3. Other resources (specify --eg. If specific laboratory equipment is required, list requirements or attach list) <p style="text-align: center;"><b>Data show</b></p>

## G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching <p style="text-align: center;"><b>Course evaluation by student</b>  <b>Student-faculty meeting</b></p>
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department <p style="text-align: center;"><b>Discussion with the group of faculty teaching the same course</b>  <b>Departmental council discussions</b></p>
3 Processes for Improvement of Teaching <p style="text-align: center;"><b>Conducting Departmental workshops given by experts</b>  <b>Periodical departmental revisions of each method of teaching</b>  <b>Development of the parent relation between the teacher and the students</b></p>

4. Processes for Verifying Standards of Student Achievement (eg. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

**Assigning group of faculty members in the same domain to grade some question for various students**

5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

**The course material and learning outcomes are periodically reviewed and the changes to taken are approved by the departmental and the higher councils  
The head of the department take the responsibility of implementing the proposed change.**

**Periodical meetings with outstanding students in the course to discuss the problems that face them in the course**

**Comparison between similar courses in relevant faculties from different universities.**