



جامعة الملك فيصل  
KING FAHD UNIVERSITY  
بجدة - الرياض - المملكة العربية السعودية

# مسارات برنامج السنة التحضيرية

## الاجتياز- الإعفاء من بعض المقررات- التسريع



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

## ١. مسار الاجتياز

إن مسار الاجتياز هو أحد تنظيمات القواعد المنظمة لبرنامج السنة التحضيرية، والذي يتم من خلاله منح المقبولين بكليات الجامعة إمكانية اجتياز كامل برنامج السنة التحضيرية دون دراسة المقررات في المدة الزمنية المحددة للبرنامج، والالتحاق المباشر بالكليات، وذلك بعد التحقق من إتقان المتقدمين لهذا المسار للمهارات والمعارف الأساسية التي يستهدفها برنامج السنة التحضيرية.

### • شروط التقديم لمسار الاجتياز:

١. أن يكون المتقدم مقبولاً على برنامج السنة التحضيرية بجامعة الملك فيصل.
٢. حصول الطالب على علامة (٦) فأكثر في اختبارات (IELTS Academic) مع حد أدنى (٥,٥) في كل مهارة، أو اجتياز الاختبار المناظر لقرار اللغة الإنجليزية (٤) والذي تعقده العمادة.
٣. اجتياز جميع الاختبارات الإلكترونية والكتابية التي تحددها عمادة السنة التحضيرية ، والحصول على درجة (٨٥) فأكثر حسب الكليات الموضحة في الجدول رقم (١) ، وحسب التنظيمات والإجراءات التي تحددها العمادة لعقد هذه الاختبارات.

## ٢- مسار الإعفاء من بعض المقررات:

إن مسار الإعفاء من بعض المقررات هو أحد تنظيمات القواعد المنظمة لبرنامج السنة التحضيرية، والذي يتم من خلاله منح المقبولين بالبرنامج إمكانية الإعفاء من بعض المقررات، على أن لا تزيد الوحدات الدراسية المعفي منها الطالب عن (٥٠٪) من إجمالي الوحدات الدراسية المعتمدة للخطة الدراسية للكلية التي حصل على قبول مبدئي بها جدول رقم (١)، ويرصد للطالب تقدير ناجح دون درجة (ند) في بقية المقررات من الخطة عند اجتيازها.

### • شروط التقديم على الإعفاء من بعض المقررات:

١. أن يكون المتقدم طالب في برنامج السنة التحضيرية بجامعة الملك فيصل.
٢. أن يتقدم الطالب بطلب الإعفاء قبل نهاية الأسبوع الأول من الربع الدراسي الأول.
٣. يجوز إعفاء الطالب من دراسة مقرر اللغة الانجليزية (١) في حال اجتياز الطالب اختبار تحديد المستوى، وتحقيق الدرجة المطلوبة التي يحددها مجلس عمادة السنة التحضيرية.
٤. يجوز أن يعفى الطالب الملتحق ببرنامج السنة التحضيرية من بعض مقررات اللغة الإنجليزية وفق ما يراه مجلس العمادة وذلك في حالة حصوله على درجة (٦١) في اختبار التوفل (Internet Based Test TOEFL) أو (٥٥) في اختبار (IELTS) أو ما يعادلها بشرط ألا يكون قد مضى على حصوله على الدرجة أكثر من عام، وقت التقدم للالتحاق بالجامعة، مع بقاء شرط الاجتياز بالمعدل المطلوب.
٥. يجوز أن يعفى الطالب من دراسة مقرر أو أكثر إذا اجتاز الاختبار الإلكتروني والكتابي المعتمد من عمادة السنة التحضيرية والحصول على درجة (٨٥) فأكثر.

### ٣- مسار التسريع

إن مسار التسريع هو أحد تنظيمات القواعد المنظمة لبرنامج السنة التحضيرية، والذي يتم من خلاله منح المتميزين من المقبولين بالبرنامج إمكانية التسريع، والالتحاق بكلياتهم؛ بعد دراسة ريعين دراسيين، واجتياز عدد من الاختبارات التي تحددها العمادة، ويرصد للطالب تقدير ناجح دون درجة (ند) في بقية المقررات من الخطة عند اجتيازها.

#### • شروط مسار التسريع :

١. تحقيق معدل تراكمي لا يقل عن ٤,٧٥ من ٥ بنهاية الربع الدراسي الثاني.
٢. اجتياز وحدات دراسية بعدد لا يقل عن ١٢ وحدة بنهاية الربع الدراسي الثاني.
٣. اجتياز جميع الاختبارات الإلكترونية والكتابية التي تحددها عمادة السنة التحضيرية والحصول على درجة «٨٥» فأكثر حسب الخطة الدراسية للكلية الحاصل على قبول مبدئي بها.
٤. يرصد للطالب تقدير ناجح دون درجة (ند) في بقية المقررات من الخطة عند اجتيازها.



**الجدول رقم (١) التالي**  
**يوضح جدول الاختبارات المطلوب اجتيازها للتقديم على المسارات**

المقررات							الكلية
العلوم الأساسية لغير الصحية	العلوم الأساسية (2)	العلوم الأساسية (1)	الرياضيات (2)	الإحصاء الحيوي	الرياضيات (1)	اللغة الإنجليزية	
	√	√		√	√	√	الطب
	√	√		√	√	√	الصيدلة الاكلينيكية
	√	√		√	√	√	طب الأسنان
	√	√		√	√	√	العلوم الطبية التطبيقية
√			√		√	√	الهندسة
√			√		√	√	العلوم
			√		√	√	الحاسب الآلي
			√		√	√	إدارة الأعمال
	√	√		√		√	الطب البيطري

## الموضوعات التي تغطيها اختبارات المسارات

في هذا القسم يتم استعراض الموضوعات التي تتناولها الاختبارات المطلوب اجتيازها في مسارات السنة التحضيرية؛ لكي يتمكن المتقدم للمسار من التعرف على محتوى كل اختبار وطبيعته وآلية إجرائه.



## Syllabus for English Upper Module

### A: Recommended Books

1. English, Andrew and English, Laura, “Academic Progress 6 Reading & Writing”, 2020, Pearson Longman, ISBN:1-292-30886-9
2. Ferree, Tess and Sanabria, Kim, “Academic Progress 6 Listening and Speaking,” 2020, Pearson Longman, ISBN:1-292-30886-9

### B: Test Format

IELTS Module	Lower Level	Upper Level	Weight
Listening	Academic Progress themes		Lab Test: <b>50%</b> <b>Test time: 50 minutes</b>
Academic Reading			
	Grammar and Vocab based on Academic Progress		
Academic Writing	Paragraph  (based on English 2 final exam to prepare students for taking English 3 at KFU)	Essay (based on IELTS Academic Writing Task 2)	Paper Test: <b>25%</b> <b>Test time: 45 minutes</b>
Speaking	Interview (based on IELTS Speaking Task 1)	Presentation (based on IELTS Speaking Task 2)	Speaking Test: <b>25%</b> <b>Test time: 10 minutes</b>



## C: Suggested Passing Criteria

1. Candidates having more than or equal to 85% marks in Lab Test part should be eligible for Paper Test and Speaking part.
2. Passing Criteria for Paper Test and Speaking part should be 85% in each

## D: Syllabus Details

Units	Topics Covered
Unit 1	Nature vs. Nurture
Unit 2	Facing Life's Obstacles
Unit 3	Medicine / Health
Unit 4	Instinct or Intellect
Unit 5	Too Much of a Good Thing?
Unit 6	Generosity / Giving
Unit 7	Environment / Water
Unit 8	Managing Your Smartphone
<b>Test: Units 1-8 Cumulative</b>	

## Syllabus for Mathematics-1 Paper

### A: Recommended Books

- 1- Fundamentals of Mathematics, A custom edition for King Faisal University  
Publisher: Pearson.
- 2- Mathematics with Applications: In the Management, Natural, and Social Sciences, Eleventh Edition and Global Edition Author: Margaret L. Lial, Thomas W. Hungerford, John P. Holcomb, Jr., and Bernadette Mullins Publisher: Pearson.

### B: Test Format

Questions Type	Number of Questions	Total Marks	Total Time (In minutes)	Test Type
Objective Part (Multiple Choice Questions)	35	70	70	Computer Based
Subjective Part	15	30	60	Paper Based

### C: Suggested Passing Criteria

1. Candidates having more than or equal to 80% marks in objective part should be eligible for subjective part.
2. Passing criteria for Mathematics-1 paper should be 85%.

D: Syllabus details

Topics	Distribution of Questions (Objective Part)	Distribution of Questions (Subjective Part)
Basic Algebraic Operations	06	02
Polynomials, Factoring, Exponents and Radicals	07	03
Equations and Inequalities	05	02
Graphs	03	01
Functions	05	02
Polynomial and Rational Functions	05	02
Exponential and Logarithmic Functions and Equations	05	03
<b>Total Questions</b>	<b>35</b>	<b>15</b>

## Syllabus for Mathematics -2 Paper

### A: Recommended Books

1. **Fundamentals of Mathematics, A custom edition for King Faisal University** Publisher: Pearson
2. **Mathematics with Applications: In the Management, Natural, and Social Sciences, Eleventh Edition and Global Edition** Author: Margaret L. Lial, Thomas W. Hungerford, John P. Holcomb, Jr., and Bernadette Mullins Publisher: Pearson
3. **College Algebra and Trigonometry, Global Edition, 6/E** Author: AMargaret L. Lial, John Hornsby, David I. Schneider, Callie Daniels Publisher: Pearson.

### B: Test Format

Questions Type	Number of Questions	Total Marks	Total Time (In minutes)	Test Type
Objective Part (Multiple Choice Questions)	35	70	70	Computer Based
Subjective Part	15	30	60	Paper Based

### C: Suggested Passing Criteria

1. Candidates having more than or equal to 80% marks in objective part should be eligible for subjective part.
2. Passing criteria for Mathematics-2 paper should be 85%.

## D: Syllabus details

Topics	Distribution of Questions (Objective Part)	Distribution of Questions (Subjective Part)
Basic Matrix Operations, Matrix Products, and Inverses	03	02
Applications of Matrices	03	01
Trigonometric Functions And Trigonometric Equations	06	02
Fundamental Identities Double-Angle and HalfAngle Identities	03	02
Limits, One-sided Limits, and Limits Involving Infinity	03	02
Techniques for Finding Derivatives, Products, Quotients, Chain Rule, Exponential and Logarithmic Functions	07	02
Antiderivatives, Area & the Definite Integral	06	02
<b>Integration by Substitution and The Fundamental Theorem of Calculus</b>	04	02
<b>Total Questions</b>	<b>35</b>	<b>15</b>

## Syllabus for Biostatistics Paper

### A: Recommended Books

1. Biostatistics for the biological and health sciences, M. M. Triola, M. F. Triola, and Jason Roy, 2nd Edition, Pearson.
2. Biostatistics: A Foundation for Analysis in the Health Sciences, 11th Edition, By Wayne W. Daniel, Chad L. Cross, Wiley.
3. Principles of Biostatistics, 2nd Edition, By Marcello Pagano, Kimberlee Gauvreau, Chapman and Hall/CRC.
4. Schaum's Outline Of Elements Of Statistics I: Descriptive Statistics And Probability, First Edition, By Stephen Bernstein, Ruth Bernstein, McGraw Hill.

### B: Test Format

Questions Type	Number of Questions	Total Marks	Total Time (In minutes)	Test Type
Objective Part (Multiple Choice Questions)	35	70	70	Computer Based
Subjective Part	15	30	60	Paper Based

### C: Suggested Passing Criteria

1. Candidates having more than or equal to 80% marks in objective part should be eligible for subjective part.
2. Passing criteria for Biostatistics paper should be 85%.

## D: Syllabus details

Topics	Distribution of Questions (Objective Part)	Distribution of Questions (Subjective Part)
Types of data, Sampling method, Types of studies, Levels of Measurement	04	01
Exploring Data with Tables and Graphs	05	02
Measures of Centre	04	02
Measures of variation	05	02
Measures of relative standing	04	02
Probability: Fundamentals, Addition rule, Multiplication rule, conditional probability	05	02
Standard Normal Distribution, Applications of Normal Distribution	04	02
Correlation Regression	04	02
Total Questions	35	15

## Syllabus for Basic Science 1 (Biology) Paper

### A: Recommended Books

#### Textbook(s) :

1. Simon. Reece. Dickey, “**Campbell Essential Biology with Physiology**”, Pearson, 2016-fifth edition. ISBN 978-0-321-96767-1.
2. **Conceptual Chemistry**, 5<sup>th</sup> edition. By: John Suchocki. Pearson. 2013.

### B: Test Format

Questions Type	Number of Questions	Total Marks	Total Time (In minutes)	Test Type
<b>Objective Part (Multiple Choice Questions)</b>	34	68	70	Computer Based
Subjective Part	16	32	60	Paper Based

### C: Suggested Passing Criteria

1. Candidates having more than or equal to 80% marks in objective part should be eligible for subjective part.
2. Passing criteria for **Basic Science 1** paper should be 85%.



## D: Syllabus details

Chapter	Topics
The Molecules of life	Organic Compounds Large Biological Molecules: Carbohydrates, Lipids, Protein, Nucleic Acids Hormones: An Overview Human Nutritional Requirements
Tour of the cell	<b>The Microscopic World of Cell</b> <b>Membrane structure</b> The Nucleus and Ribosomes: Genetic Control of the Cell The Endomembrane System: Manufacturing and Distributing Cellular Products Energy Transformations: Chloroplasts and Mitochondria The Cytoskeleton: Cell Shape and Movement
The Working Cell	Some Basic Energy Concepts Energy Transformations: ATP and Cellular work Enzymes Membrane Function

Cellular Reproduction: Cells from Cells	<p>What Cell Reproduction Accomplishes</p> <p>The Cell Cycle and Mitosis</p> <p>Cancer Cells: Dividing Out of Control</p> <p>Meiosis, the Basis of Sexual Reproduction</p>
The Structure and Function of DNA	<p>DNA: Structure and Replication</p> <p>Information flow from DNA to RNA to Protein Mutations</p>
	Viruses and Other Noncellular Infectious Agents
Unifying Concepts of Animal Structure and Function	<p>The Structural Organisation of Animals</p> <p>Exchanges with the External Environment</p> <p>Regulating the Internal Environment</p>
Circulation and Respiration	<p>Unifying Concepts of Animal Circulation</p> <p>The Human Cardiovascular System</p> <p>Unifying Concepts of Animal Respiration</p> <p>The Human Respiratory System</p>
The Body's Defenses	<p>An Overview of the Immune System</p> <p>Innate Immunity</p> <p>The Lymphatic System</p>

## E: Syllabus details for exam

Chapter	Distribution of Questions (Objective Part)	Distribution of Questions (Subjective Part)
The Molecules of life	5	2
Tour of the cell	5	2
The Working Cell	3	1
Cellular Reproduction: Cells from Cells	5	2
The Structure and Function of DNA	4	2
Unifying Concepts of Animal Structure and Function	4	2
Circulation and Respiration	5	2
The Body's Defenses	5	2
Total Questions	35	15

## Syllabus for Basic Science 2 (Chemistry) Paper

### A: Recommended Books

#### Required Textbook(s):

Basic Science 2 custom edition, 2022.

#### Additional References:

1- Chemistry, 12 th edition. By: R. Chang. McGraw-Hill. 2017.

2- Conceptual Physical Science Explorations, 6 th edition. By: Hewitt, Suchocki, and Hewitt. Pearson Addison- Wesley, San Francisco, CA. 2017

### B: Test Format

Questions Type	Number of Questions	Total Marks	Total Time (In minutes)	Test Type
Objective Part (Multiple Choice Questions)	35	70	70	Computer Based
Subjective Part	15	30	60	Paper Based

### C: Suggested Passing Criteria

1. Candidates having more than or equal to 80% marks in objective part should be eligible for subjective part.
2. Passing criteria for **Basic Science 2** paper should be 85%.

## D: Syllabus details

Chapter	Topics
Particles of Matter	<ul style="list-style-type: none"><li>• Mass is How Much, and Volume is How Spacious Density is the Ratio of Mass and Volume</li><li>• Gas Laws Describe the Behavior of Gases</li></ul>
Elements of Chemistry	<ul style="list-style-type: none"><li>• There Is a System for Naming Compounds</li></ul>
Subatomic Particles	<ul style="list-style-type: none"><li>• The Shell Model Helps to Explain the Periodic Table</li><li>• The Periodic Table Helps Us Predict Properties of Elements</li></ul>
How Atoms Bond	<ul style="list-style-type: none"><li>• Electron-Dot Structures</li><li>• Atoms Can Lose or Gain Electrons to Become Ions Ionic Bonds Result from a Transfer of Electrons</li><li>• The Electrons of Metallic Bonds Are Loosely Held</li><li>• Covalent Bonds Result from a Sharing of Electrons</li><li>• Valence Electrons Determine Molecular Shape</li><li>• Polar Covalent Bonds—Uneven Sharing of Electrons</li><li>• Molecular Polarity—Uneven Distribution of Electrons</li></ul>

How molecules mix	<ul style="list-style-type: none"> <li>• Four Different Kinds of Dipole Attractions</li> <li>• A Solution Is a Single-Phase Homogeneous Mixture</li> <li>• Concentration Is Given as Moles per Liter</li> <li>• Solubility Is How Well a Solute Dissolves</li> </ul>
Concentration calculations	<ul style="list-style-type: none"> <li>• Common Types of Solutions</li> <li>• Molarity, Molality, Mole Fraction, Mole Percent, Parts by Mass</li> </ul>
How Chemicals Reacts	<ul style="list-style-type: none"> <li>• Chemical Reactions Are Represented by Chemical Equations</li> <li>• Counting Atoms and Molecules by Mass</li> <li>• Converting Between Grams and Moles</li> <li>• Chemical Reactions Can Be Exothermic or Endothermic</li> <li>• Chemical Reactions Are Driven by the Spreading of Energy</li> <li>• <b>Chemical Reactions Can Be Slow or Fast.</b></li> </ul>

Acids and Bases	<ul style="list-style-type: none"> <li>• Acids Donate Protons and Bases Accept Them</li> <li>• Some Acids and Bases Are Stronger Than Others</li> <li>• Solutions Can Be Acidic, Basic, or Neutral</li> <li>• Buffer Solutions Resist Changes in pH</li> </ul>
<b>Organic Chemistry</b>	<ul style="list-style-type: none"> <li>• Organic Compounds</li> <li>• Hydrocarbons Contain Only Carbon and Hydrogen</li> <li>• Unsaturated Hydrocarbons Have Multiple Bonds</li> <li>• Functional Groups Give Organic Compounds Character</li> <li>• Alcohols, Phenols, and Ethers Contain Oxygen</li> <li>• Amines and Alkaloids Contain Nitrogen</li> <li>• Carbonyl Containing Compounds</li> </ul>
Medicinal Chemistry	<ul style="list-style-type: none"> <li>• Medicines Are Drugs That Benefit the Body</li> <li>• The Lock-and-Key Model Guides the Synthesis of New Medicines</li> <li>• Chemotherapy Cures the Host by Killing the Disease.</li> </ul>

## E: Syllabus details for exam

Chapter	Distribution of Questions (Objective Part)	Distribution of Questions (Subjective Part)
Particles of Matter	3	2
Elements of Chemistry	3	1
Subatomic Particles	3	2
How Atoms Bond	4	1
How molecules mix	3	2
Concentration calculations	2	1
How Chemicals Reacts	4	2
Acids and Bases	3	2
Organic Chemistry	5	1
Medicinal Chemistry	3	1
Total Questions	35	15



# Syllabus for Basic Science Non-medical Paper

## A: Syllabus

### Chemistry:

**Chapter 12: Atoms and Periodic Table:** Atoms are ancient and empty, The elements, Protons and neutrons, The periodic table, The Quantum hypothesis, The Shell Model

**Chapter 15: How Atoms Bond and Molecules Attract:** Electron dot structures, The formation of ions, Ionic bond, Metallic bond, Covalent bond, Polar covalent bonds

**Chapter 17: How Chemical Reacts:** Chemical equations, Counting atoms and molecules by mass  
**Chapter 19: Organic Compounds:** Hydrocarbons, Unsaturated hydrocarbons, Functional groups

### Physics:

**Chapter 1: Pattern of Motion and Equilibrium:** Galileo's' Concept of Inertia, Mass- A Measure of Inertia, Net Force, Speed and Velocity, Acceleration

**Chapter 2: Newton's Law of Motion:** Newton's First Law of Motion, Newton's Second Law of Motion, Force and Interactions, Newton's Third Law of Motion,

**Chapter 3: Momentum and energy:** Momentum and Impulse, Impulse Changes Momentum, Conservation of Momentum, Energy and Work, Conservation of energy, Power, Sources of energy

**Chapter 8: Static and Current Electricity:** Electric Charge, Coulomb's Law, Charge Polarization, Electric Field, Electric Potential, Voltage Sources, Electric Current, Electrical Resistance, Ohm's Law, Electric Power,

**Chapter 9: Magnesium and Electromagnetic Induction:** Electromagnetic Induction, Generators and Alternating Current, Power Production, The Transformer-Boosting or Lowering Voltage

**Chapter 11: Light:** Electromagnetic Spectrum, Transparent and Opaque Materials, Reflection, Refraction,

Dispersion, Polarization

## Biology:

**Chapter 3:** The Molecules of life: Organic compounds, Synthesis, Hydration , Carbohydrates and Lipids, Protein and Nucleic Acid

**Chapter 4:** A tour of the cell, microscopic world of the cell, the endomembrane system, Nucleus, Ribosome, chloroplasts, mitochondria, and the cytoskeleton.

**Chapter 10:** The structure and function of DNA: Structure and Replication, genetic code, the flow of genetic information from DNA to RNA, The flow of genetic information from mRNA to protein. Mutation, viruses, and other infectious agents

## B: Learning Resources

### 1. Textbook(s):

**Conceptual Physical Science Explorations**, 6th edition. By: Hewitt, Suchocki, and Hewitt. Pearson  
**Campbell Essential Biology with physiology**, Simon. Reece. Dickey, Pearson, fifth edition  
ISBN:978-1-292-10236-8

### 2. Additional References:

**Conceptual Physical Science Explorations**, 2<sup>nd</sup> edition. By: Hewitt, Suchocki, and Hewitt.  
Pearson Addison-Wesley, San Francisco, CA. 2010.

**Campbell Biology** Jane B. Reece, Lisa A. Urry, Michael L. Cain, Benjamin Cummings,  
2010- 9<sup>th</sup> edition ISBN 0321558235.

## C: Test Format

Questions Type	Number of Questions	Total Marks	Total Time (In minutes)	Test Type
<b>Objective Part</b> <b>(Multiple Choice Questions)</b>	36	72	75	Computer Based
Subjective Part	14	28	60	Paper Based

## D: Syllabus details for exam

Chapter	Distribution of Questions (Objective Part)	Distribution of Questions (Subjective Part)
Atoms and Periodic Table	4	2
How Atoms Bond and Molecules Attract	4	1
How Chemical Reacts	2	1
Organic Compounds	2	1
The Molecules of Life	4	2
A Tour of Cell	4	1
The structure and function of DNA	4	1
Patterns of motion and equilibrium, Newtons Law of motion	3	1
Momentum and Energy	3	1
Static and Current Electricity, Magnesium and Electromagnetic Induction	3	2
Light	3	1
Total Questions	36	14

## E: Suggested Passing Criteria

1. Candidates having more than 80% marks in objective part will be eligible for subjective part.
2. Passing criteria for Basic Science Nonmedical paper is 85%.



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