

**How to cite this document:**

Naṣīr al-Dīn al-Ṭūsī. *al-Risāla al-Muʿīniyya*, index of chapters. In F. Jamil Ragep, Fateme Savadi, Sajjad Nikfahm-Khubravan. *al-Risāla al-Muʿīniyya (al-Risāla al-Mughniya) and its Supplement*. Vol. II, *English Translation* (Tehran: Mirath Maktoob), 15–17.

## Index of Chapters of This Treatise



## Index of Chapters of this Treatise

It is appropriate to arrange this treatise into four books, and each book consists of several chapters, as follows.

BOOK I: On the Introductory Propositions of Astronomy (*'ilm-i hay'at*),  
in Two Chapters

CHAPTER ONE: On the Introductory Propositions Pertaining to  
the Science of Geometry

CHAPTER TWO: On the Introductory Propositions Pertaining to  
the Science of Natural Philosophy

BOOK II: On the Configuration of the Upper Bodies, in Fourteen Chap-  
ters

CHAPTER ONE: On the Situation of All the Simple Bodies

CHAPTER TWO: An Exposition of the Primary and Secondary  
Motions, and the Names of the Great Circles

CHAPTER THREE: An Exposition of the Circumstances of the  
Eighth Orb and the Fixed Stars

CHAPTER FOUR: An Exposition of the Orbs and Motions of the  
Sun

CHAPTER FIVE: An Exposition of the Orbs and Longitudinal Mo-  
tions of the Moon

CHAPTER SIX: An Exposition of the Orbs and Longitudinal Motions of the Upper Planets and Venus

CHAPTER SEVEN: An Exposition of the Orbs and Longitudinal Motions of Mercury

CHAPTER EIGHT: On the Latitudes of the Six Planets

CHAPTER NINE: An Exposition of the Planetary Sectors

CHAPTER TEN: An Exposition of Retrogradation and Direct Motion, and Orientality and Occidentality

CHAPTER ELEVEN: An Exposition of Parallax

CHAPTER TWELVE: On the Reason for the Increase and Decrease in the Moon's Light

CHAPTER THIRTEEN: On the Reason for Lunar and Solar Eclipses, and the Interval Between Two Lunar or Two Solar Eclipses

CHAPTER FOURTEEN: On Conjunctions and on Visibility and Invisibility of the Planets

BOOK III: On the Configuration of the Earth, and the Variability of the Circumstances of Locations on It with Respect to the Changing Positions of the Upper Bodies, in Twelve Chapters

CHAPTER ONE: On the Configuration of the Earth, and a Brief Exposition of Its Circumstances

CHAPTER TWO: On the Characteristics of Localities That Are on the Equator

CHAPTER THREE: On the Characteristics of Localities Whose Latitude Is Less Than or Equal to the Obliquity

CHAPTER FOUR: On the Characteristics of Localities Whose Latitude Is Greater Than the Obliquity, up to Where It Is Equal to the Complement of the Obliquity

CHAPTER FIVE: On the Characteristics of Localities Whose Latitude Is Greater than the Complement of the Obliquity up to the Maximum Latitude

CHAPTER SIX: On the Co-ascension of the Zodiacal Signs

CHAPTER SEVEN: On the Equation of Daylight and the Ortive  
Amplitude

CHAPTER EIGHT: On Degrees of Transit, Rising, and Setting

CHAPTER NINE: On Determining Day and Night, Dawn and  
Dusk, and Hours

CHAPTER TEN: On Year, Month, Calendar, and Intercalation

CHAPTER ELEVEN: On Shadows and Their Circumstances

CHAPTER TWELVE: On the Meridian Line and the Azimuth of  
Cities

BOOK IV: On Determining Distances and Sizes, in Six Chapters

CHAPTER ONE: On the Measure of the Earth's Sphere

CHAPTER TWO: On the Ratio of the Moon's Size to the Earth

CHAPTER THREE: On Determining the Distances of the Moon  
from the Earth

CHAPTER FOUR: On Determining the Size and Distances of the  
Sun

CHAPTER FIVE: On Determining the Sizes and Distances of the  
Vacillating Planets

CHAPTER SIX: On Determining the Distance and Sizes of the  
Fixed Stars

This is the Index of Chapters.