

*This certificate program is designed to be completed along with an approved BA or BS degree to fulfill the requirements necessary for the UKanTeach Certificate in your desired area of licensure: mathematics, biology, chemistry, earth and space science, or physics. The program is also designed to fulfill the course requirements necessary to gain state licensure eligibility in the above mentioned areas of licensure to become a secondary teacher in Kansas, but completion of the program does not guarantee the student's licensure. **This document has been created as a guideline and is not considered to be an official document.***

For further information about meeting degree requirements, or transferring to KU, it is strongly recommended to meet with a JCCC Counselor and a UKanTeach Advisor. For additional information regarding licensure requirements, contact the UKanTeach office, ukanteach@ku.edu.

UKANTEACH PROFESSIONAL DEVELOPMENT REQUIREMENTS:

A minimum grade of C is required in these courses.

Courses that can be completed at JCCC:

UK Course:	JCCC Equivalent:
LA&S 290 UKan I (1 hr)	MATH 214 UKanTeach I (1 hr)
LA&S 291 UKan II (1 hr)	MATH ??? UKanTeach II (1 hr) <i>planned Spring 2012</i>

Courses that will need to be completed at KU:

CHEM 598/BIOL 598 Research Methods (3 hrs)
Mathematics Students: MATH 409 & 410 (3 hrs) Science Students: HIST 510 (3 hrs)
C&T 360 Knowing and Learning in Science & Mathematics (3 hrs)
C&T 366 Classroom Interactions in Science & Mathematics (3 hrs)
C&T 448/359 Reading and Writing across the Curriculum (3/1 hrs)
C&T 460 Project-Based Instruction (3 hrs)
C&T 500 Student Teaching (6 hrs) (<i>Requires a 2.5 cumulative GPA in major and overall.</i>)
C&T 598 Special Topics Seminar (1 hr)

UKANTEACH SCIENCE & MATHEMATICS REQUIREMENTS FOR EACH AREA OF LICENSURE:

A minimum grade of D is required in these courses.

Mathematics

Major courses that can be completed at JCCC:

UK Course(s):	JCCC Equivalent:
MATH 121 Calc I (5 hrs)	MATH 241 Calc I (5 hrs)
MATH 122 Calc II (5 hrs) & MATH 223 Vector Calc (3 hrs)	MATH 242* Calc II (5 hrs) & MATH 243* Calc III (5 hrs)
MATH 290 Elem. Lin. Alg. (3 hrs)	MATH 246 Elem. Lin. Alg. (3 hrs)

*Both MATH 242 & 243 have to be taken at JCCC for any KU credit.

Courses that will need to be completed at KU:

MATH 500 OR 765 (3 hrs)
MATH 526 OR 628 (3 hrs)
MATH 320/530/558/559 (3 hrs)
MATH 590 OR 790 (3 hrs)
Functions & Modeling (3 hrs)

Biology

Major courses that can be completed at JCCC:

UK Course(s):	JCCC Equivalent:
BIOL 150 Prin. Cell. Mole. Bio. (4 hrs)	BIOL 135 Prin. Cell. Mole. Bio. (4 hrs)
BIOL 152 Prin. Organismal Biology (5 hrs)	BIOL 150 Biology of Organisms (5 hrs)

Supporting science courses that can be completed at JCCC:

UK Course(s):	JCCC Equivalent:
MATH 115 Calc I & MATH 116 Calc II (3 hrs each) OR MATH 121 Calc I (5 hrs)	MATH 231 Bus/ Appl Cal I & MATH 232 Bus/Apppl Cal II (3 hrs each) OR MATH 241 Calc I (5 hrs)
CHEM 184 Fndts. of Chem. I (5 hrs)	CHEM 124 Gen. Chem I (4 hrs) & CHEM 125 Gen. Chem. I Lab (1 hr)
CHEM 188 Fndts. of Chem. II (5 hrs)	CHEM 131 Gen.Chem II (4 hrs) & CHEM 132 Gen.Chem. II Lab (1 hrs)
CHEM 624 Organic Chem I (3 hrs)	CHEM 220 Organic Chem I (5 hrs)

Courses that will need to be completed at KU:

BIOL 350 (3 hrs)
BIOL 412 (3 hrs)
BIOL 414 (3 hrs)
BIOL 416 (3 hrs)
BIOL 400, 408, OR 600 (3 hrs)

Chemistry

Major courses that can be completed at JCCC:

KU Course(s):	JCCC Equivalent:
CHEM 184 Fndts. of Chem. I (5 hrs)	CHEM 124 Gen. Chem I (4 hrs) & CHEM 125 Gen. Chem. I Lab (1 hr)
CHEM 188 Fndts. of Chem. II (5 hrs)	CHEM 131 Gen.Chem II (4 hrs) & CHEM 132 Gen.Chem. II Lab (1 hr)
CHEM 624 Organic Chem I (3 hrs)	CHEM 220 Organic Chem I (5 hrs)

Courses that will need to be completed at KU:

MATH 122 (5 hrs)*
CHEM 516 (3 hrs)
CHEM 517 (2 hrs)
CHEM 625 (2 hrs)
CHEM 640 OR 646 (3 hrs)
CHEM 641 OR 647 (2 hrs)

Supporting science courses that can be completed at JCCC:

KU Course(s):	JCCC Equivalent:
MATH 115 Calc I & MATH 116 Calc II (3 hrs each) OR MATH 121 Calc I (5 hrs)*	MATH 231 Bus/ Appl Cal I & MATH 232 Bus/Appl Cal II (3 hrs each) OR MATH 241 Calc I (5 hrs)*
PHSX 114 College Physics I (4 hrs) OR PHSX 211 General Physics I (4 hrs)	PHYS 130 General Physics I (5 hrs) OR PHYS 220 Engineering Physics I (5 hrs)
PHSX 115 College Physics II (4 hrs) OR PHSX 212 General Physics II (4 hrs)	PHYS 131 General Physics II (5 hrs) OR PHYS 221 Engineering Physics II (5 hrs)

*If student elects to take MATH 121 equivalent at JCCC, they will need to complete MATH 122 at KU.

Earth & Space Science

Major courses that can be completed at JCCC:

KU Course(s):	JCCC Equivalent:
GEOL 101 Intro to Geol (3 hrs) & GEOL 103 Geol Fndts. Lab (2 hrs)	GEOS 130 General Geology (5 hrs)
ASTR 191 Cont. Astr (3 hrs) & ASTR 196 Intro Astr Lab (1 hr)	ASTR 120 Fundamentals of Astronomy (3 hrs) OR ASTR 122 Astronomy (4 hrs)

Courses that will need to be completed at KU:

ATMO 105 (5 hrs)
GEOL 311 (3 hrs)
GEOL 312 (1 hr)
GEOL 331 (4 hrs)
GEOL 360 (2 hrs)
GEOL 521 (3 hrs)
GEOL 560 (3 hrs)
GEOL 562 (4 hrs)

Supporting science courses that can be completed at JCCC:

KU Course(s):	JCCC Equivalent:
MATH 115 Calc I (3 hrs) OR MATH 121 Calc I (5 hrs)	MATH 231 Bus/ Appl Calc I (3 hrs) OR MATH 241 Calc I (5 hrs)
CHEM 184 Fndts. of Chem. I (5 hrs) OR CHEM 125 College Chemistry (5 hrs)	CHEM 124 Gen. Chem I (4 hrs) & CHEM 125 Gen. Chem. I Lab (1 hr) OR CHEM 120 Chemistry in Society (4 hrs)* OR CHEM 122 Principles of Chemistry (5 hrs)*
BIOL 100 Principles of Biology (3 hrs) OR BIOL 152 Prin. Organismal Biol (5 hrs)	BIOL 121 Intro Biology for Non-Majors (4 hrs) OR BIOL 150 Biology of Organisms (5 hrs)
PHSX 114 College Physics I (4 hrs) OR PHSX 211 General Physics I (4 hrs)	PHYS 130 General Physics I (5 hrs) OR PHYS 220 Engineering Physics I (5 hrs)

*Students can take either CHEM 120 or CHEM 122 both will transfer to KU as CHEM 125.

Physics

Major courses that can be completed at JCCC:

KU Course(s):	JCCC Equivalent:
PHSX 211 General Physics I (4 hrs)	PHYS 220 Engineering Physics I (5 hrs)
PHSX 212 General Physics II (4 hrs)	PHYS 221 Engineering Physics II (5 hrs)

Courses that will need to be completed at KU:

PHSX 313 (3 hrs)
PHSX 316 (1 hr)
PHSX 511 (3 hrs)
PHSX 521 (3 hrs)
PHSX 531 (3 hrs)
PHSX 536 OR 516 (4 hrs)

Supporting science courses that can be completed at JCCC:

KU Course(s):	JCCC Equivalent:
MATH 121 Calc I (5 hrs)	MATH 241 Calc I (5 hrs)
MATH 122 Calc II (5 hrs) & MATH 223 Vector Calc (3 hrs)	MATH 242* Calc II (5 hrs) & MATH 243* Calc III (5 hrs)
MATH 290 Elem. Lin. Alg. (3 hrs)	MATH 246 Elem. Lin. Alg. (3 hrs)
MATH 220 Applied Differential Equations (3 hrs)	MATH 244 Differential Equations (3 hrs)

*Both MATH 242 & 243 have to be taken at JCCC for any KU credit.