

Department Of CSUS, College of Agriculture and Natural Resources
 Bachelor of Science Degree in
Agriculture, Food and Natural Resources Education

120 Credits Required
 (Revised March 2016)

Name _____

PID: _____

UNIVERSITY REQUIREMENTS

Writing (4 credits)

WRA _____ (4) _____

Integrative Studies ** (16 credits)

Arts and Humanities

IAH(A) 20 _____ (D, I, N) (4) _____

IAH(B) 2 _____ (D, I, N) (4) _____

Social Sciences.

ISS 2 _____ (D, I, N) (4) _____

ISS 3 _____ (D, I, N) (4) _____

**** Diversity Requirement:** You must complete 2 different diversity designated courses (“D”, “I”, or “N”) for 2 of the above IAH or ISS selections.

Diversity Requirement Completed _____

COLLEGE REQUIREMENTS

EC 201 or EC 202 (3) Economics _____

MTH 116 (5) College Algebra and Trigonometry _____

OR

MTH 103 (3) College Algebra _____

MTH 114 (3) Trigonometry _____

MTH 1825 This course and credits DO NOT count toward graduation requirements. (Must complete 123 total credits)

MTH 1825 (3) Intermediate Algebra _____

1. All of the following courses:

ANS 110 (4) Introductory Animal Agriculture _____

BS 161 (3) Cell and Molecular Biology _____

BS 162 (3) Organismal and Population Biology _____

BS 172 (2) Organismal and Population Biology Lab _____

CEM 141 (4) General Chemistry _____

CSS 101 (3) Introduction to Crop Science _____

CSS 210 (3) Fundamentals of soil science _____

CSUS 200 (3) Introduction to Sustainability _____

CSUS 300 (3) Theo Foundations of Sustainability _____

CSUS 301 (3) Community Engagement for Sustainability _____

CSUS 322 (3) Leadership for Community Sustainability _____

CSUS 343 (3) Comm. Food and Agricultural Systems _____

CSUS 433 (3) Grant Writing and Fund Dev. (W) _____

FOR 202 (3) Introduction to Forestry _____

HRT 203 (3) Principles of Horticulture _____

TE 150 (3) Reflections on Learning _____

TE 250 (3) Hum Div., Power, and Opp in Soc. Instit _____

IBIO 355 (3) Ecology _____

IBIO 355L (1) Ecology Laboratory (W) _____

2. One of the following:

ABM 100 (3) Decision-making in Agri- Food System _____

ABM 130 (3) Farm Management 1 _____

3. One of the following:

CSUS 464 (3) Environmental and Natural Resource Policy in MI _____

CSUS 465 (3) Environmental and Natural Resource Law _____

4. Teacher Education Program Option

All of the following (15 Credits):

A) Teacher Education

TE 302 (4) _____

Learners and Learning in Contexts –Secondary (W)

TE 407 (5) _____

Teaching Subject Matter to Diverse Learners – Secondary (W)

TE 408 (5) _____

Crafting Teaching Practices – Secondary (W)

TE 409 (1) _____

Crafting Teaching Practices – Secondary Minor

B) Teaching Minor (See Back Page)

A Secondary Disciplinary teaching minor chosen from a list of approved secondary education minors for teacher certification. Refer to the *Teacher Certification* section of the Department of Teacher Education.

5. Non-Teacher Education Program Option

All of the following (15 Credits):

CSUS 493 (3) _____

Professional Internship in Community Sustainability

CSUS ____ (3) _____

_____ (3) elective _____

_____ (3) elective _____

_____ (3) elective _____

Electives/Minor _____

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BIOLOGY MINOR (24 to 26 Credits)

1. All of the following courses:

- BS 161 (3) Cell and Molecular Biology _____
- BS 171 (2) Cell and Molecular Biology Lab _____
- BS 162 (3) Organismal and Population Biology _____
- BS 172 (2) Organismal and Population Biology Lab _____
- IBIO 341 (4) Fundamental Genetics _____
- IBIO 355 (3) Ecology _____
- IBIO 355L (1) Ecology Laboratory (W) _____

2. One of the following:

- PLB 301 (3) Introductory Plant Physiology _____
- PSL 250 (4) Introductory Physiology _____
- @HRT 361 (3) Applied Plant Physiology _____

3. One of the following:

- *BMB 200 (4) Introduction to Biochemistry _____
- *MMG 301 (3) Introductory Microbiology _____

*CEM 143 (4) is a prerequisite course for 3.

@HRT 361 is not listed in the minor. Special dispensation has been provided to AFNRE to substitute this course in 2.

INTEGRATED SCIENCE (50 to 55 Credits)

1. All of the following courses:

- #AST 207 (3) The Science of Astronomy _____
- BS 161 (3) Cell and Molecular Biology _____
- BS 171 (2) Cell and Molecular Biology Lab _____
- BS 162 (3) Organismal and Population Biology _____
- BS 172 (2) Organismal and Population Biology Lab _____
- CEM 141 (4) General Chemistry _____
- CEM 142 (3) General and Inorganic Chemistry _____
- CEM 161 (1) Chemistry Laboratory I _____
- GEO 203 (3) Introduction to Meteorology _____
- GLG 201 (4) The Dynamic Earth _____
- ISE 401 (4) Science Labs for Sec Schools _____
- ISE 420 (3) Integrative Science Research _____
- PHY 231 (3) Introductory Physics I _____
- PHY 232 (3) Introductory Physics II _____
- PHY 251 (1) Introductory Physics Laboratory _____
- PHY 252 (1) Introductory Physics Laboratory II _____

2. A series of the following:

- CEM 143 (4) Survey of Organic Chemistry _____
- OR**
- CEM 251 (3) Organic Chemistry I _____
- CEM 252 (1) Organic Chemistry II _____
- CEM 255 (2) Organic Chemistry Lab _____

3. A series of the following:

- PSL 250 (4) Introductory Physiology _____
- OR**
- IBIO 355 (3) Ecology _____
- IBIO 355L (1) Ecology Laboratory (W) _____

#Note: PHY 231 or PHY 231C (3) Introduction to Physics I - Is a prerequisite or concurrent course.

Note that the Integrated Science endorsement MUST be taken in addition to a science minor (e.g., Biology, Chemistry, Physics, Earth Science).

Also, courses can count for both the Biology/Chemistry/Physics or Earth Science Minor and Integrated Science endorsement.