

MEMORANDUM OF UNDERSTANDING

between



Walla Walla Community College and the College of Agricultural, Human, and Natural Resource Sciences Washington State University

Walla Walla Community College (WWCC) and Washington State University (WSU) hereby enter into a Memorandum of Understanding (MOU) based on a Customized Articulation Agreement (CAA) for transfer students from WWCC to WSU with AAS-T degree in Food Science who follow the attached advising recommendations and matriculate into a B.S. degree in Food Science, General Option in the College of Agricultural, Human, and Natural Resource Sciences (CAHNRS) at Washington State University.

This Customized Articulation Agreement is intended to eliminate duplication of coursework and better integrate programs to ensure a more efficient pathway to graduation. The purpose of this set of advising recommendations is to provide students of WWCC a more efficient transfer pathway to Washington State University (WSU). Students who complete the AAS-T degree in Food Science, General Option with at least a 2.0 cumulative grade point average will be admitted to the Food Science majors at WSU; and will be granted Junior standing, assuming the total number of credits accepted in transfer equals at least 60 semester credits.

Transfer coursework for students completing the WWCC degree covered by this MOU will be applied to the Washington State University Common Requirements (UCORE, the general education program), as applicable under the WSU Transfer Course Equivalency Guidelines, and to the individual degree options within the CAHNRS as specified in this agreement. The transfer of credit allowed under this MOU is structured to maximize the use of WWCC credit applicable to each specific degree option, up to the total of 73 semester credits of lower-division transfer credit allowed under Washington State University policy. All such credit not applicable under the WSU Transfer Course Equivalency Guidelines applies only to the WSU degree covered by this agreement. If students transfer prior to completing the transfer degree, acceptance of the courses toward a WSU degree will be based on WSU Transfer Equivalency Guidelines. The agreed upon courses of study are outlined in Attachments A and B of this MOU. Attachment A details the specific set of requirements to be completed at WWCC and Washington State University in order to earn a B.S. degree in Food Science, General Option. Attachment B specifies the required term-by-term course of study as offered by WWCC and WSU.

The required course of study may be changed at any time with the mutual written agreement of the participating institutions. At such time, the Attachments to this MOU will be updated. Suggestions about which courses of study need to be reviewed will be called for each year. However, unless otherwise agreed upon by both institutions on an individual student basis, students will be responsible for the course of study at WWCC and Washington State University in effect at the time the student enters the WWCC AAS-T degree in Food Science specified in this MOU.

The undersigned certify this Memorandum of Understanding:

| washington State University | |
|--|------------------|
| EtChilton | April 27, 2022 |
| Dr. Elizabeth Chilton, Provost and Executive Vice President, Chancellor-designate WSU Pullman | Date |
| | |
| Jellen S. J. J. C. On O. | April 27, 2022 |
| Dr. William B. Davis, Interim Vice Provost for Academic Engagement and Student Achievement | Date |
| Riw T. Karny | April 21, 2022 |
| Dr. Richard T. Koenig, Interim Dean | Date |
| College of Agricultural, Human, and Natural Resource Sciences | |
| lymlyanyyal | |
| 21 / // | April 30th, 2022 |
| Dr. Girish Ganjyal, Interim Director | Date |
| School of Food Science | |
| | .003 |
| | |
| Walla Walla Community College | |
| | -110100 |
| A will | 5/10/22 |
| Dr. Jessica Clark, Vice President of Instruction | Date |
| | , |
| Dauld Hell | 6/16/22 |
| Mr. Gerald Anhorn, Dean of Workforce Education & BAS Progr | ams Date |

ATTACHMENT A

Articulation Planning Grid
Walla Walla Community College AAS-T in Food

| | | | U | | , |
|-----|---------------|------|----|------|------------------------|
| WSU | CAHNRS | B.S. | in | Food | Science-General Option |

| Cl Courses & Se Credit Equivalent | | WSU Requirements & Semester Credits | |
|--|------|-------------------------------------|----|
| A: WSU UCOR | | | T |
| | 1 | First-Year Experience | 3 |
| HIST& 128 | 3.35 | [ROOT] Roots of | |
| 11151 & 125 | 3.55 | Contemporary Issues: | |
| | | HISTORY 105 | |
| | | 1110101111111 | 1 |
| | | Foundational Competencies | 9 |
| MATH& 146 | 3.35 | [QUAN] Quantitative | |
| (or Math 201) | 3.33 | Reasoning: STAT 212 | |
| (Of Iviatil 201) | | reasoning. 2771 212 | |
| ENGL& 101 | 3.35 | [WRTG] Written | |
| LIVOLEC TOT | 3.55 | Communication: ENGLISH | |
| | | 101 | |
| | | 101 | |
| CMST&220 | 3.35 | [COMM] Communication: | |
| CIVISTOCIZO | 3.55 | COM 102 | |
| | | OR [WRTG] | 1 |
| | | out (vitt o) | |
| | | Ways of Knowing | 16 |
| ECON& 201 | 3.35 | [SSCI] Inquiry in the Social | |
| | 1 | Sciences: ECONS 101 | |
| | | | |
| HIST& 127 | 3.35 | [HUM] Inquiry in the | 1 |
| | | Humanities: HISTORY 121 | |
| | | | |
| ART& 100 | 3.35 | [ARTS] Inquiry in the | |
| | | Creative and Professional | |
| | | Alts: FINE ART 101 | |
| | | | |
| | | A. Inquiry in the Natural | |
| | | Sciences ² | |
| BIOL& 211 | 3.35 | [BSCI] Biological Sciences: | |
| | | BIOLOGY 107 | |
| CHEM& 161 | 3.35 | [PSCI] Physical Sciences: | |
| | | CHEM 1057 | |
| | | | |
| | | Integrative and Applied | 6 |
| | | Learning | |
| HIST& 126 | 3.35 | [DIVR] Diversity: HISTORY | |
| | | 120 |] |
| | | 18 | |
| | | [CAPS] Integrative Capstone: | 3 |
| | | FS 489 | |
| | | U at lower-division ³ | 0 |
| | | U at upper-division ⁴ | 3 |
| Total UCORE Credits to be completed at WSU | | | 3 |

| B: WSU Writing Requirem | ents | |
|----------------------------|------------|--|
| Writing in the Major (min. | FS 302 [M] | |
| Of two [M] courses) | FS 461 [M] | |
| Writing Portfolio | | |

| Cl Courses & Semester Equivalents ¹ | r Credit | WSU Requirements &Semester Credits | |
|---|----------|---------------------------------------|-----|
| C: Core Program Rec | uiremen | | |
| CHEM& 162 + 163 | 6.7 | CHEM 106 ⁷ | |
| | | PHYSICS 101 & 111 | 4 |
| MATH& 151 | 3.35 | MATH 140 or 171 | |
| BIOL& 260 | 3.35 | MBIOS 101 | |
| NUTR& 101 | 3.35 | BIOLOGY 140 | |
| | | FS 110 | 3 |
| | | CHEM 345 | 4 |
| | | FS 220 | 3 |
| | | Chem 370 or MBIOS 303 | 3-4 |
| Core Credits at WSU | at lower | -division ³ | 10 |
| Core Credits at WSU | at uppe | r-division ⁴ | 7-8 |

| D: Major/Option Requiren | nents | |
|---------------------------|------------------------------------|----|
| | FS 302 | 1. |
| | FS 303 | 3 |
| | FS 350 | 5 |
| | FS 416 | 3 |
| | FS 417 | 2 |
| | FS 418 | 1 |
| | FS 432 | 3 |
| | FS 433 | 1 |
| | FS 460 | 3 |
| | FS 461 | 1 |
| | FS 470 | 3 |
| | FS 489 ¹¹ | 0 |
| | FS Elective credits | 12 |
| | Emphasis Elective credits | 8 |
| Major/Option Credits at W | VSU at Iower-division ³ | 0 |
| Major/Option Credits at V | VSU at upper-division ⁴ | 46 |

| E: Open Electives | | | |
|------------------------|------------|---------------------------|---|
| AGBS 221 ¹⁰ | 3,35 | ECONS 3518 | |
| Elective Credits at | WSU at lov | ver-division ³ | 0 |
| Elective Credits at | WSU at up | per-division ⁴ | 0 |

| Summary | |
|--|---------|
| Minimum Credits for WSU degree ⁵ | 120 |
| Total Upper-Division Credits at WSU ⁴ | 53-54 |
| Total Upper-Division Credits at WWCC8 | 3.35 |
| Total Semester Credits transferred to WSU ⁶ | 60 |
| Total UCORE Credits to be completed at WSU | 3 |
| Total Core Credits to be completed at WSU | 17-18 |
| Total Major Credits to be completed at WSU | 46 |
| Total Elective Credits to be completed at WSU | 0 |
| Total Credits to be Completed at WSU | 66-67 |
| Total Credits to complete articulated agreement | 130-131 |

ATTACHMENT A

Articulation Planning Grid

Walla Walla Community College AAS-T in Food WSU CAHNRS B.S. in Food Science-General Option

NOTES:

¹ Conversion formula for quarter to semester credits: Quarter credits x . 67 = Semester credits

² Students have two options: A) Inquiry in the Natural Sciences (7), Biological Science (3-4) and Physical Science (3-4) **OR** an Interdisciplinary Science (8). Choose A or B to fulfill this requirement.

³ Upper-division courses may also fulfill these requirements.

⁴ A minimum of 40 semester hours must be upper-division (300-400) credit (Rule 114).

⁵ Minimum WSU graduation requirements are 120 total semester hours and a 2.0 overall gradepoint

average (GPA). Each department may have specific GPA requirements.

⁶ The maximum combined lower-division transfer credit allowed [from approved accredited institutions, CLEP (College Level Examination Program), AP Advanced Placement, IB (International Baccalaureate), Cambridge International, military, and any other source] shall be 73 semester credit hours toward a baccalaureate degree irrespective of when those hours were earned.

⁷ This sequence (CHEM& 161, 162, and 163) must be fully completed to transfer to WSU asCHEM

105 and 106.

8 Students will take AGBS 221 at WWCC which is equivalent to ECONS 351 at WSU. These credits will count towards the students' total upper division credits

⁹ First year experience course will need to be taken at either Walla Walla Community College or

Washington State University.

¹⁰ Satisfies the Emphasis elective credits.

11 Credits for this course counted for UCORE total.

ATTACHMENT B

Articulation Planning Grid

Walla Walla Community College AAS-T in Food ScienceWSU CAHNRS B.S. in Food Science-General

| Course# | Course Title | Quarter Credits ¹ | Sem. Credits |
|---------------|-------------------------------|---------------------------------|-----------------|
| Year 1 - Fall | Quarter | | li. |
| CHEM& 161 | General Chemistry 12 | 5 | 3.35 |
| HIST& 126 | World Civ. I= HISTORY 120 | 5 | 3.35 |
| NUTR& 101 | Nutrition= BIOL 140 | 5 | 3.35 |
| | Total Credits | 15 | 10.05 |
| Year 1 - Wi | nter Quarter | | |
| CHEM& 162 | General Chemistry II2 | 5 | 3.35 |
| HIST& 127 | World Civ. II= HISTORY 121 | 5 | 3.35 |
| ENGL& 101 | English Comp. I=ENGLISH 101 | 5 | 3.35 |
| | Total Credits | 15 | 10.05 |
| Year 1 - Spi | ing Quarter | | |
| CHEM& 163 | General Chemistry III2 | 5 | 3.35 |
| AGBS 201 | Microeconomics. = ECONS | 5 | 3.35 |
| HIST& 128 | World Civ, III= HIST 105 | 5 | 3.35 |
| | Total Credits | 15 | 10.05 |
| | Year One Total | 45 | 30.15 |

| Year 2 - Fa | ill Quarter | | |
|--------------|--|----|-------|
| BIOL& 211 | Majors Cellular= BIOLOGY 107 | 5 | 3.35 |
| CMST&220 | Public Speaking= COM 102 | 5 | 3.35 |
| MATH& 151 | Calculus I | 5 | 3.35 |
| 151 | Total Credits | 15 | 10.05 |
| Year 2 - W | inter Quarter | | |
| BIOL&213 | Majors Plant ³ | 5 | 3,35 |
| ART& 100 | Art Appreciation. = FINE ART | 5 | 3.35 |
| AGBS 221 | Intro to Food & Ag Markets= ECONS 351 | 5 | 3.35 |
| | Total Credits | 15 | 10.05 |
| Year 2 - Sp | oring Quarter | | |
| BIOL& 212 | Majors Animal3 | 5 | 3.35 |
| MATH& 146 | Intro to Statistics= STAT 212 | 5 | 3.35 |
| BIOL&260 | Microbiology = MBIOS IO1 | 5 | 3.35 |
| | Total Credits | 15 | 10.05 |
| | Year Two Total | 45 | 30.15 |
| Т | OTAL WWCC CREDITS | 90 | 60.30 |

| Year 3 - Fall Semester | | | |
|------------------------|-------------------------|--------------|--|
| Course# | Course Title | Sem. Credits | |
| CHEM345 | Organic Chemistry | 4 | |
| FS 110 | Intro to Food Science | 3 | |
| FS 302 | Food Processing Lab | 1 | |
| FS 303 | [M] Food Processing | 3 | |
| FS 416 & 417 | Food Microbiology & Lab | 3+2 | |
| FS XXX | Food Science Elective | 1 | |
| | Total Credits | 17 | |

| Year 3 - Spr | ing Semester | |
|--------------------------|---|--------------|
| Course# | Course Title | Sem. Credits |
| FS 220 | Food Safety & Quality | 3 |
| Chem 370 or MBIOS 303 | Chemical Biology or Intro Biochemistry | 3-4 |
| FS 350 | Instrumental & Sensory Analysis of Food and Lab | 5 |
| FS 418 | Seminar in Food Science | 1 |
| FS 432 | Food Engineering | 3 |
| FS 433 | Food Engineering Lab | 1 |
| FS XXX | Food Science Elective | 1 |
| | Total Credits | 17-18 |

| Year 4 - Fall Semester | | |
|------------------------|------------------------|--------------|
| Course# | Course Title | Sem. Credits |
| FS 460 | Food Chemistry | 3 |
| FS 461 | [Ml Food Chemistry Lab | 1 |
| FS XXX | Food Science Electives | 8 |
| PHYSICS 101 & 111 | Physics 101 & 111 Lab | 3+1 |
| Total Credits | | 16 |

| Year 4 - Sp | ring Semester | |
|-------------|--------------------------|--------------|
| Course# | Course Title | Sem. Credits |
| FS 470 | Advanced Food Technology | 3 |
| FS 489 | Food Product Development | 3 |
| FS XXX | Food Science Electives | 2 |
| | Emphasis Electives | - 8 |
| | Total Credits | 16 |
| | Total WSU Credits | 66-67 |

ATTACHMENT B

Articulation Planning Grid

Walla Walla Community College AAS-T in Food ScienceWSU CAHNRS B.S. in Food Science-General

NOTES:

Conversion formula for quarter credits to semester credits: Quarter credits x .67 = Semester credits.

This sequence (CHEM& 161, 162, and 163) must be fully completed to transfer to WSU as CHEM 105 and 106.