Howard Lake-Waverly-Winsted ISD #2687

"Excellence through Education"

NEW COURSE PROPOSAL

- ☐ Step 1: Communicate with the Principal about the new course.
- ☐ Step 2: Complete this form fully.
- ☐ Step 3: Obtain required signatures.
- ☐ Step 4: Submit to Counseling Department.
- ☐ Step 5: Counseling Department adds items in RED to SYNERGY.

Course Background

Name of proposed course name: Agronomy-Crop Production
Date of proposed new course *(school year it would begin)*: 25-26
Department submitting proposal: AFNR
Staff member name submitting proposal: Seena glessing
Is the proposed course replacing an existing course? ☐ YES ■ NO
If so, what course is being replaced? N/A
Rationale *(include reasons why this proposal needs to be considered outside the curriculum cycle)*:

Strong population of students intersted in Agronomy and Crop Production. Course would allow students to plan, implement and carry out a successful school crop plot, allowing for real word situations.

Type of course: ☐ Required ■ Elective
Prerequisite(s): n/a
Course Duration: ■ Semester ☐ Full Year
Grade Levels: ☐ 9th Grade ■ 10th Grade ■ 11th Grade ■ 12th Grade

MN Academic Standards: PS.01.02.02.a. Identify the categories of soil water. PS.01.02.02.b. Discuss how soil drainage and water-holding capacity can be improved.PS.01.03.01.a. Summarize the impact of environmental

Course Description:

This course provides students with knowledge and skills regarding enterprises producing cereal grains, fiber, forages, and oilseed products; includes instruction in soils, plant physiology, crop cultivation practices, plant diseases, pest management, harvesting and

Students will work with the school crop plot; planning, planting, harvesting, weed ID, nutritional requirements, Pest ID and soil conditions depending on the semester the course is offered. Students may explore GPS/GIS systems and how autonomy is affecting the

Scheduling Considerations *(# of semesters, alternating years, grade levels allowed, etc.)*:
n/a

Estimated Costs

Resources/Textbook *(list title, copyright date, publisher, and cost)*:
n/a

Curriculum Writing Needs *(# of hours needed for curriculum mapping and writing essential standards)*:
n/a

Staff Development Needs *(additional training staff needs to teach the course)*: n/a

Staff Impact *(who will teach the course, effect on dept. staffing, effect on other depts. +/-, student/staff ratio, etc.)*: n/a

Facility Impact *(any special consideration for space, equipment, etc.)*: _____
n/a

Required Signatures:

Department Chair: _____ **Date:** 11/1/24

Curriculum Director: _____ **Date:** 11/13/24

Principal: _____ **Date:** 11/13/24

After obtaining the required signatures, submit to Counseling Department. Counseling Department will add to Synergy.

Final Approval Signature:

Principal/Superintendent/Board: _____ **Date:** _____

Additional Notes:

_____

_____

_____

Curriculum/Counseling Department Use Only:

Synergy District Course:
Course ID Assignment: _____
Academic Type: _____
Course Subject Area: _____
STAR Assignment: _____
STAR Grade Level: _____
(If not 9-12, mark with the lowest grade offered.)

National Course Classification:
Subject Area: _____
Course Level: _____
Course Code: _____

State Course Classification:
Course Record Type: _____
Subject Area: _____
Course Level: _____
Standard Addressed: _____
AP Indicator: ☐ *(Remember to fill in - AP Test Group Name)*

Civil Rights Data Collection:
CRDC Subject Area: _____
CRDC Course Code: _____
Federal AP Code: _____

College In Schools Courses:
College Prep: ☐
College Approved: ☐
Dual Credit: ☐
Course Level: Dual/Concurrent Enrollment
(Check the Dual/Concurrent Box in State Course)
College Code: _____
College Course Code: _____
College Course Title: _____
_____
College Course Credits: ☐ 2 ☐ 3 ☐ 4
College Name: _____
_____

Agronomy & Crop Production

Howard Lake-Waverly-Winsted High School
Grade Level: 10-12
1 Semester = .5 credit elective

Teacher:	
Contact Information:	
Course Information:	This course provides students with knowledge and skills regarding enterprises producing cereal grains, fiber, forages, and oilseed products; includes instruction in soils, plant physiology, crop cultivation practices, plant diseases, pest management, harvesting and marketing. Students will work with the school crop plot; planning, planting, harvesting, weed ID, nutritional requirements, Pest ID and soil conditions depending on the semester the course is offered. Students may explore GPS/GIS systems and how autonomy is affecting the agriculture industry.
Course Goals:	• Describe how agricultural crops have been improved throughout the years. • Examine current crop improvement methods by comparing and evaluating each method. • Generate a list of future improvements possible through biotechnology and genetic engineering. • Identify important grain crops. • List the leading grain production states. • Describe how to select grain crop varieties. • Describe cultural requirements of major grain crops. • Describe minor and emerging grain crops. • Explain how grain crops are harvested for maximizing quality. • Explain how grain crops are stored to maintain quality. • Distinguish between beneficial and harmful insects. • Describe the biology of insects and nematodes. • Classify insects on the basis of mouth parts and life cycle. • Describe scouting procedures and define economic thresholds. • Explain how insect and nematode control is monitored. • Describe safety practices to use with pesticides. • Explain the features and uses of land. • Describe land capability and list capability factors. • Perform land capability classification. PS.01.02.02.a. Identify the categories of soil water.

	PS.01.02.02.b. Discuss how soil drainage and water-holding capacity can be improved. PS.01.03.01.a. Summarize the impact of environmental factors on nutrient availability (e.g., moisture, temperature, pH). PS.01.03.04.a. Identify fertilizer sources of essential plant nutrients; explain fertilizer formulations, including organic and inorganic; and describe different methods of fertilizer application. PS.01.03.04.b. Calculate the amount of fertilizer to be applied based on nutrient recommendation and fertilizer analysis. PS.01.03.05.a. Research and summarize production methods focused on soil management (e.g., crop rotation, companion planting, cover crops, etc.). PS.03.03.01.b. Identify and analyze major local weeds, insect pests and infectious and noninfectious plant diseases. PS.03.05.01.a. Identify and summarize harvesting methods and equipment. PS.03.05.02.a. Research and summarize reasons for calculating crop loss and or damage. PS.03.05.03.a. Research and summarize how safety is ensured at each stage of the following processes: harvesting, processing, and storing.
Extra Help / Questions	Instructor is available before or after school to assist with any student. Available by email at any time.
Course Materials:	1. Notebooks - Paper or Electronic is fine. 2. Textbook assigned or student chooses electronic version posted on google classroom. 3. A Pencil will be necessary at times. 4. Chromebook
Student Leadership - FFA	• Students are encouraged to participate in FFA activities at the district, state and national levels. • FFA provides students with effective leadership and community involvement opportunities. • FFA Chapter is affiliated with their state and national organizations. • Recognized FFA Chapter is an integral part of the CTE program. • All CTE students have the opportunity to participate in a student organization. • FFA assists students to develop leadership skills through a variety of activities and/or competitions at conferences on the local, regional, state and national levels. • FFA has a written program of work that reflects education, service and social activities.

Career Exploration - SAE	• CTE program assists students with individual student career plans and promotes self-reflection by students. • CTE program supports the existence of a career resource center at the school that is open to students, families and community. • CTE program assists students in gaining an understanding of the career planning process. • CTE program provides students with an opportunity to develop career portfolios. • CTE program uses a variety of strategies (e.g., mentorships, e-learning), to enhance the student's career development process. • Community partners assist a CTE program by providing direct career development links for students.
Articulation	None
Behavioral Expectations and Consequences:	1. Students are expected to come to class prepared with all necessary supplies and completed assignments every day. 2. Students are expected to participate in class discussions, note-taking, question/answer sessions, online activities, labs, etc. 3. Students are expected to be on their best behavior, put their best effort forward, and follow all guidelines to create a positive educational climate for all. 4. Leaving class will be permitted only on a limited basis. 5. Except for water, NO FOOD or DRINK is allowed in the classroom. Water can be brought in only if it is in a covered container. Food and water are NOT allowed in the lab areas. 6. **Cell Phones:** Student phones are to be silenced and kept in their lockers from 7:55 until 3:00. Students will not be allowed to possess their phone in the classroom unless directed to do so by the teacher. Students are able to possess their phone during the lunch period. During the 4-minute passing time students may check their phone and respond to parent messages. If a student needs to contact their parent/guardian during the school day they can request a pass from a teacher to use their device or the office phone. If parents /guardians need to communicate with their child prior to 3:00, they may contact the High School office. 7. Working cooperatively with others is expected. 8. Students are expected to sign and follow a laboratory safety contract, if applicable to the class. 9. Students are expected to follow all general school policies as stated in the student handbook. **ABSENCE POLICY:** 1. Please check the student handbook for details of the attendance policy. 2. Students are expected to be in class on time and ready to go when the bell rings. Tardies: Consequences for tardiness will be as follows: First three tardies are free. Verbal warning will address consequences of being tardy. Fourth tardy and every tardy thereafter: Students will be assigned 30

	minutes of detention by the teacher: the teacher will call the parent, guardian, or adult contact to provide notification of detention and to discuss the problem of tardiness. This detention must be scheduled and served within a week of the violation. Failure to serve this detention, or subsequent detentions, will result in an incremental grade reduction. 3. Assignments will be posted to Google Classroom for completion and submission. a. **Students are responsible for make-up work when absent. If a lab day is missed, a make-up sheet with photos will need to be made demonstrating the skills missed from the lab. Students will have one week to submit missing labs.** 4. Students must bring an admit pass to class after each absence. Admit Slip: Students must bring an admit pass to each class after an absence. Students will need to stop at the office and receive an admit pass from Sandy upon their return to school from an absence. 5. Students will not be allowed makeup daily work or labs for unexcused absences. Students will be expected to know the information and will take the test/quiz on the day of return. 6. Tardies will be handled as per the student handbook. 7. For prearranged absence, students must present an absence slip before leaving.
Information regarding behavior system:	See student handbook.
Grading:	**Grading** A 90-100 B 80-89 C 70-79 D 60-69 F 59 and below
Homework Policy:	Homework will be graded intermittently. It is the student's responsibility to hand in their homework on time. For more details about homework see the section on late work or absences.
Self-Monitoring Checklist:	Check online weekly. Inquire with Winnie before or after class or afterschool.
Guidelines for Success:	Be responsible for your own learning. Set high expectations for yourself and monitor your learning/grade. Attend class. Be on time. Bring materials every day. Organize your binder. Be actively engaged. Ask questions and seek help as needed.

	Do your own work. Complete all assignments. Respect the others in the learning community.