

ACADEMIC SENATE PROPOSAL TRACKING SHEET

(Document To Be Originated By Academic Senate Secretary On Canary Color Paper)

All proposals **MUST** have their originating college faculty body (Ex. Nursing, Technical Sciences, Arts & Sciences, Education) approval and must be signed by the submitter and the college chair/dean before being submitted to the academic senate secretary.

1. Submit all proposals (using the appropriate Academic Senate program/degree and/or course revision forms) to the Academic Senate Secretary.
2. The Academic Senate Secretary logs and numbers items and forwards them to the appropriate Academic Senate subcommittee(s): Teacher Education (if applicable), General Education (if applicable), or Curriculum.
3. The Academic Senate subcommittee(s) consider(s) the proposal. If approved, the proposal is forwarded to the next committee. If a committee disapproves the proposal, the originator may request that the item be forwarded to the next body for consideration. The committee will provide written rationale to the originator when a proposal is disapproved and the proposal is returned to the originator.
4. The Academic Senate considers the proposal and approves or disapproves. If approved, the proposal is forwarded to the Full Faculty for consideration. If the Academic Senate disapproves the proposal, the originator may request that the item be forwarded to the Full Faculty for consideration. The Academic Senate will provide written rationale to the originator when proposals are disapproved and the proposal is returned to the originator.
5. The Full Faculty considers academic senate approved proposals. If faculty approve, the proposal will then be forwarded to the Provost. The Provost approves or disapproves the proposal. If approved, the proposal is then forwarded to the Chancellor.
7. The Chancellor approves or disapproves the proposal.

Subcommittee and Academic Senate college representatives will notify their respective colleges' of the progress of submitted proposals or the proposal may be tracked via the web page --

<http://www.msun.edu/admin/provost/asproposals.htm>

Documentation and forms for the curriculum process is also available on the web page:

<http://www.msun.edu/admin/provost/asforms.htm>

*******(If a proposal is disapproved at any level, it is returned through the Academic Senate secretary to the Chair/Dean of the submitting college who then notifies the originator.)**

Proposal # <u>02-24</u>	Title: <u>AOT BS + AG TECH AAS Program Revision</u>
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(proposal explanation, submitter and college chair/dean signatures on attached program/degree or course revision form)

Received by ACAD Senate Forwarded to Teacher Ed Council Forwarded to Gen Ed Committee Returned to ACAD Senate Forwarded to Curriculum Committee Returned to ACAD Senate for Vote Sent to Provost's office for Full Faculty vote Voted on at Full Faculty meeting Forwarded to Provost for Approval/Disapproval Forwarded to Chancellor for Approval/Disapproval Copies sent to originating college and registrar's office	Date <u>4/1/03</u> <u>4/1/03</u> <u>4/1/03</u> <u>4/9/03</u> <u>4/29/03</u> <u>5/18/03</u> <u>5/27/03</u> <u>6/5/03</u>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Approved _____</td> <td style="width: 50%; text-align: center;">Disapproved _____</td> </tr> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">Signature _____</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">Date _____</td> </tr> <tr> <td style="text-align: center;">Approved _____</td> <td style="text-align: center;">Disapproved _____</td> </tr> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">Signature _____</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">Date _____</td> </tr> <tr> <td style="text-align: center;">Approved _____</td> <td style="text-align: center;">Disapproved _____</td> </tr> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">Signature _____</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">Date _____</td> </tr> <tr> <td style="text-align: center;">Approved _____</td> <td style="text-align: center;">Disapproved _____</td> </tr> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">Signature _____</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">Date _____</td> </tr> <tr> <td style="text-align: center;">Approved _____</td> <td style="text-align: center;">Disapproved _____</td> </tr> <tr> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">Signature _____</td> <td style="border-top: 1px solid black; border-bottom: 1px solid black;">Date _____</td> </tr> </table>	Approved _____	Disapproved _____	Signature _____	Date _____	Approved _____	Disapproved _____	Signature _____	Date _____	Approved _____	Disapproved _____	Signature _____	Date _____	Approved _____	Disapproved _____	Signature _____	Date _____	Approved _____	Disapproved _____	Signature _____	Date _____
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PROGRAM/DEGREE REVISION FORM 3/31/03

NEW DROPPED MAJOR REVISION FOR INFORMATION ONLY

College Technical Sciences Program Area Ag Operations Technology Date 3/31/03

Submitter Thomas M. Sedek Chair/Dean Augusta K. Kead Date 11.1.03
 Signature William H. Deley Signature (Indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s).

Please provide in the space below a "before and after" picture of the program with the changes in the program noted. Attach appropriate Course Revision Forms. Please indicate changes by shading the appropriate cells.

PROPOSAL TITLE Revision of Ag Operations Technology B.S. Degree

OLD PROGRAM

Course Prefix	#	Course Title	Credits	
			Fall	Spr.
Freshman Year				
AOT	101	Intro. to Ag Oper Tech	2	
AG	101	Animal Science	3	
AG	102	Plant Science	3	
AG	150	Ag Computing	3	
ENGL	111	Written Comm. I	3	
SPCH	141	Fundamentals of Speech	3	
AGMT	110	Intro Ag Machines		2
ATDI	134	Electrical Systems I		4
CIS	171	Data Base I		3
MATH	110	Liberal Arts Math		4
or				
MATH	112	College Algebra		3
TECH	100	Ind. Safety/Waste Mgt		2
TOTAL			17	14/15
Sophomore Year				
DIES	204	Intro Hydral & Pneum	2	
DIES	214	Hydral & Pneum Lab	2	
ENGL	112	Written Comm. II	3	
METL	140	Intro Weld & Cutting	3	
PHYS	114	Foundations of Physic Sci	4	
Program Selectives			3	
AG	204	Soils		4
AG	230	Ag Pest Mgmt		4
DRFT	244	Topog Map & GIS Appl		3
Option Selectives				3
TOTAL			17	14

NEW PROGRAM

Course Prefix	#	Course Title	Credits	
			Fall	Spr.
Freshman Year				
IT	100	Intro to Technology	3	
AG	101	Animal Science	3	
AG	102	Plant Science	3	
AG	105	Ag Marketing & Economics	3	
AG	150	Ag Computing		3
AG	125	Farm Management		3
ENGL	111	Written Comm. I	3	
SPCH	141	Fundamentals of Speech		3
or				
SPCH	142	Interpersonal Comm		3
CIS	110	Intro to Computing	3	
MATH	110	Math for Liberal Arts		4
or				
MATH	112	College Algebra		3
Distribution Credits (A, B, or C)				3
TOTAL			18	15/16
Sophomore Year				
AG	218	Crop Production	4	
AG	245	Livestock Production	3	
or				
AG	254	Forage & Range Mgmt.	4	
ENGL	112	Written Comm. II	3	
Option Selectives (lower division)			6	
AG	204	Soils		4
AG	230	Ag Pest Mgmt		4
AG	244	Livestock Feeding		4
Option Selectives (lower division)				3
TOTAL			16/17	15

See next page...

Revision of Ag Operations Technology B.S. Degree Continued

OLD PROGRAM

Course Prefix	#	Course Title	Credits	
			Fall	Spr.
Junior Year				
AGED	353	Coop Bus. Principles	3	
AOT	301	Global Posit. Sys.	2	
ATDI	265	Heating & Air	4	
BREN	330	Water Resources Law	2	
Distribution Requirement (Area B)				3
AG	305	Ag Commodity Mktg		3
AG	350	Ag Computer Mgmt		3
A&TE	333	Const Tech		3
MFTG	308	Industrial Electronics		4
Program Selectives				3
TOTAL			14	16
Senior Year				
AG	440	Trends & Issues in Ag	3	
AGMT	410	Ag Machinery Mgmt.	3	
Distribution Req. Area A			3	
Program Selectives			3	
AMT	480	Current Model Technology		3
ARNR	450	Range Watershed Mgmt.		3
TSCI	304	Fuels and Lubes		3
Distribution Req. Area A				3
Distribution Req. Area B				3
TOTAL			13	15
TOTAL DEGREE CREDITS			120/121	

NEW PROGRAM

Course Prefix	#	Course Title	Credits	
			Fall	Spr.
Junior Year				
AOT	3XX	Econ. Devel. In Rural Areas	2	
AOT	301	Global Positioning Systems	2	
AOT	3XX	Soil & Water Mgmt.	2	
Distribution Credits (Area A, B, or C)			6	
AG	305	Ag Commodity Mktg.		3
AG	350	Ag Computer Mgmt.	3	
Option Selectives (300 & Above)				3
Option Requirements				6
Distribution Credits (Area A, B, or C)				3
TOTAL			15	15
Senior Year				
AG	440	Trends & Issues in Ag	3	
Distribution Credits (Area A, B, or C)			3	
Option Selectives (300 & Above)			6	
Option Requirements			3	
Option Selectives (300 & Above)				6
Distribution Credits (Area A, B, or C)				3
Electives				0/2
TOTAL			15	12/14
TOTAL DEGREE CREDITS			120	

Lower Division Option Selectives (Choose 1 Option)

Course Prefix	#	Course Title	Credits	
			Fall	Spr.
Lower Division is Listed Together With Upper Division in Old Program				
TOTAL				

Course Prefix	#	Course Title	Credits	
			Fall	Spr.
Agribusiness Option Selectives (9 Cr. Needed)				
ACCT	261	Principles of Accounting I	3	
AG	279	Cooperative Education		6
BUED	245	Personal Finance	3	
BUS	100	Intro to Business	3	
BUS	110	Creative Problem Solving		3
BUS	250	Business Statistics		3
BUS	271	Legal Environment of Business		3
Agri-Technology Option Selectives (9 Cr. Needed)				
ATDI	134	Auto/Diesel Electrical/Elec. Sys.	4	
AGMT	120	Forage Implements		3
AGMT	130	Introduction to Tractors	3	
AGMT	205	Intro to Grain Harvesting Equip	3	
AGMT	210	Tillage & Planting Implements		3
IT	130	Construction Technology		3
IT METL	140	Introduction to Welding Cutting		3
ATDI	265	Heating & Air Conditioning	4	
IT	111	Ind. Safety/Waste Mgt		2
TOTAL				

See next page...

PROGRAM/DEGREE REVISION FORM 3/31/03

NEW DROPPED MAJOR REVISION FOR INFORMATION ONLY

College Technical Sciences Program Area Agriculture Technology Date 3/31/03

Submitter T. Weber Chair/Dean William H. Dealey Date 4-1-03
 Signature Signature (indicates college level approval)

Please provide a brief explanation & rationale for the proposed revision(s).

Please provide in the space below a "before and after" picture of the program with the changes in the program noted. Attach appropriate Course Revision Forms. Please indicate changes by shading the appropriate cells.

PROPOSAL TITLE Revision of Ag Technology - AAS. Degree

OLD PROGRAM

FRESHMAN YEAR

Courses to be taken ANY Semester

CIS	110 Intro To Computers	3
ENGL	111 Written Communication I	3
SPCH	141 Fundamentals of Speech	3
MATH	110 Math for Liberal Arts	4
	OR	
MATH	112 College Algebra	3

Courses to be taken Fall Semester

AG	100 Leadership Development	2
AG	101 Animal Science	3
AG	102 Plant Science	3
AG	105 Ag. Marketing & Economics	3
AG	150 Agricultural Computing	3

Courses to be taken Spring Semester

AG	125 Farm Management	3
	Selectives	6
BIOL	151 Essential of Biology (Area C)	4
	OR	
CHEM	111 General Chemistry (Area C)	3

SOPHOMORE YEAR

Courses to be taken Fall Semester

AG	218 Crop Production	4
AG	254 Forage & Range Mgmt.	4
	Selectives	6

Courses to be taken Spring Semester

AG	204 Soils	4
AG	230 Agricultural Pest Mgmt.	4
AG	244 Livestock Feeding	4

NEW PROGRAM

Course Prefix	#	Course Title	Credits	
			Fall	Spr.
Freshman Year				
IT	100	Intro to Technology	3	
AG	101	Animal Science	3	
AG	102	Plant Science	3	
AG	105	Ag Marketing & Economics	3	
AG	150	Ag Computing		3
AG	125	Farm Management		3
ENGL	111	Written Comm. I	3	
SPCH	141	Fundamentals of Speech		3
	or			
SPCH	142	Interpersonal Comm		3
CIS	110	Intro to Computing	3	
MATH	110	Math for Liberal Arts		4
	or			
MATH	112	College Algebra		3
		Distribution Credits (A, B, or C)		3
TOTAL			18	15/16
Sophomore Year				
AG	218	Crop Production	4	
AG	245	Livestock Production	3	
	or			
AG	254	Forage & Range Mgmt.	4	
ENGL	112	Written Comm. II	3	
		Option Selectives (lower division)	6	
AG	204	Soils		4
AG	230	Ag Pest Mgmt		4
AG	244	Livestock Feeding		4
		Option Selectives (lower division)		3
TOTAL			16/17	15

See next page...

Revision of Ag Technology AAS. Degree Continued

OLD PROGRAM

NEW PROGRAM

Lower Division Option Selectives (Choose 1 Option)

AGRIBUSINESS EMPHASIS SELECTIVES

ACCT	261	Principles of Accounting I (F)	3
ACCT	262	Principles of Accounting II (S)	3
AG	245	Livestock Production (F)	4
AG	279	Cooperative Education (F/S)	6
BUS	100	Intro. To Business (F)	3
BUS	245	Personal Finance (F)	3
BUS	250	Business Statistics (F)	3
BUS	271	Legal Environ. of Business (S)	3
ECON	241	Microeconomic Principles (F)	3

AGRI TECHNOLOGY EMPHASIS SELECTIVES

AG	279	Cooperative Education (F/S)	6
AGMT	110	Intro. to Ag. Mach./Equip (S)	2
AGMT	130	Intro. to Ag. Tractors (F)	3
ATDI	134	Auto/Dies Elt/Electronic Sys. I (F/S)	4
DIES	204	Intro. to Hydraulics & Pneum. (F)	2
DIES	214	Intro. to Hydra/Pneum. Lab (F)	2
DRFT	156	Introduction to CAD (F/S)	3
DRFT	244	Topo. Mapping & GIS Apps. (S)	3
METL	140	Intro. To Welding/Cutting (F/S)	3
TECH	100	Ind. Safety/Waste Mgmt. (S)	2

METL


Course Prefix	#	Course Title	Credits	
			Fall	Spr.
Agribusiness Option Selectives (9 Cr. Needed)				
ACCT	261	Principles of Accounting I	3	
AG	279	Cooperative Education		6
BUED	245	Personal Finance	3	
BUS	100	Intro to Business	3	
BUS	110	Creative Problem Solving		3
BUS	250	Business Statistics		3
BUS	271	Legal Environment of Business		3
Agri-Technology Option Selectives (9 Cr. Needed)				
ATDI	134	Auto/Diesel Electrical/Elec. Sys.	4	
AGMT	120	Forage Implements		3
AGMT	130	Introduction to Tractors	3	
AGMT	205	Intro to Grain Harvesting Equip	3	
AGMT	210	Tillage & Planting Implements		3
IT	130	Construction Technology		3
IT	140	Introduction to Welding Cutting		3
ATDI	265	Heating & Air Conditioning	4	
IT	111	Ind. Safety/Waste Mgt		2
TOTAL				

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

COURSE REVISION FORM

NEW DROPPED MAJOR REVISION FOR INFORMATION ONLY

College Technical Sciences Program Area Industrial Technology Date 3/31/03

Submitter  Chair/Dean _____ Date _____
Signature Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
Better prepare AOT and other students for careers related to their majors

Please provide the following information:

College: *Technical Sciences*

Program Area: *Industrial Technology*

Date: *3/31/03* *PGEN*

Course Prefix & No.: *X 3xx*

Course Title: *Alternative Power Sources*

Credits: *3*

Required by:

Selective in: *AOT*

Elective in: ~~*GREEN*~~

General Education:

Lecture: *3*

Lecture/Lab:

Contact hours lecture: *3*

Contact hours lab:

Current Catalog Description (include all prerequisites):

Proposed or New Catalog Description (include all prerequisites):

This course examines the selection and application of alternate energy sources for power generation.

Course Outcome Objectives:

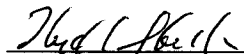
The student will examine the selection and application of alternate energy sources for power generation.

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

COURSE REVISION FORM

NEW DROPPED MAJOR REVISION FOR INFORMATION ONLY

College Technical Sciences Program Area Industrial Technology Date 3/31/03

Submitter  Chair/Dean _____ Date _____
Signature Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):

Better prepare AOT and other students for careers related to their majors

Please provide the following information:

College: *Technical Sciences*

Program Area: *Industrial Technology*

Date: *3/31/03* *EET*

Course Prefix & No.: *X 3xx*

Course Title: *Instrumentation & Data Logging*

Credits: *3*

Required by:

Selective in: *AOT*

Elective in: ~~*CPET, II*~~

General Education:

Lecture: *3*

Lecture/Lab:

Contact hours lecture: *3*

Contact hours lab:

Current Catalog Description (include all prerequisites):

Proposed or New Catalog Description (include all prerequisites):

This course covers the selection and application of transducers and sensors as components in measuring systems.

Course Outcome Objectives:

The student will examine the selection and application of sensors and transducers and the use of data logging to collect information.

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

COURSE REVISION FORM

NEW DROPPED MAJOR REVISION FOR INFORMATION ONLY

College Technical Sciences Program Area Ag Operations Technology Date 3/31/03

Submitter Thomas M. W. J. D. J. Chair/Dean _____ Date _____
Signature Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):

This course was offered on the 'quarter' system and was abandoned when we moved to the semester system. The current AOT degree calls for a course from MSU-Bozeman (Water Resources Law) which has never been offered. We will reinstate our Water Mgmt. as a replacement for BREN 330.

Please provide the following information:

College: *Technical Sciences*

Program Area: *Ag Operations Technology*

Date: *3/31/03*

Course Prefix & No.: *AOT 3xx*

Course Title: *Soil & Water Management*

Credits: *2*

Required by: *AOT*

Selective in:

Elective in:

General Education:

Lecture: *2*

Lecture/Lab:

Contact hours lecture: *2*

Contact hours lab:

Current Catalog Description (include all prerequisites):

Proposed or New Catalog Description (include all prerequisites):

This course is a study of soil and water and plant relationships. Emphasis will be on dry land soil practices, irrigation principles and practices, point source pollution, and measurement and methods of control.

Course Outcome Objectives:

- 1. Develop an awareness of the role soil, water, and the environment play in agriculture*
- 2. Define new directions and challenges for agriculture including source pollution and erosion issues*
- 3. Interpret government agencies role in agriculture*

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

COURSE REVISION FORM

NEW DROPPED MAJOR REVISION FOR INFORMATION ONLY

College Technical Sciences Program Area Ag Operations Technology Date 3/31/03

Submitter Thomas M. Weber Chair/Dean _____ Date _____
Signature William H. Deley Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):

Better prepare AOT students for careers related to agriculture & land resource management

Please provide the following information:

College: *Technical Sciences*

Program Area: *Ag Operations Technology*

Date: *3/31/03*

Course Prefix & No.: *AOT 3xx*

Course Title: *Geographic Information Systems*

Credits: *3*

Required by:

Selective in: *AOT*

Elective in:

General Education:

Lecture: *2*

Lecture/Lab: *1*

Contact hours lecture: *2*

Contact hours lab: *2*

Current Catalog Description (include all prerequisites):

Proposed or New Catalog Description (include all prerequisites):

This course will involve the study of Geographic Information Systems (GIS) for natural resource and land management. Students will develop an understanding of spatial reasoning and methods used to visually inventory and analyze land based resources. GIS software, images and data sources commonly used for natural resource management by industry and government agencies will be featured in this class.

Course Outcome Objectives:

Students successfully completing this class will be able to:

- 1. Utilize various data sources for computer based visual examination of geo referenced land areas*
- 2. Produce maps and visual images from geo-referenced land resource data*
- 3. Understand common GIS terminology, capabilities, applications and GPS interface*

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

ArcView 8.x software

COURSE REVISION FORM

NEW DROPPED MAJOR REVISION FOR INFORMATION ONLY

College Technical Sciences Program Area Ag Operations Technology Date 3/31/03

Submitter Thomas M. Weiler Chair/Dean _____ Date _____
Signature William H. Dealey Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):

This course will provide our AOT majors with a knowledge base on rural economic development with an emphasis on cooperatives. MSU-Bozeman's AGED 353 (Coop Bus. Principles) has been difficult to take by our students because of budget constraints.

Please provide the following information:

College: *Technical Sciences*

Program Area: *Ag Operations Technology*

Date: *3/31/03*

Course Prefix & No.: *AOT 3xx*

Course Title: *Economic Development in Rural Areas*

Credits: *2*

Required by: *AOT*

Selective in:

Elective in:

General Education:

Lecture: *2*

Lecture/Lab:

Contact hours lecture: *2*

Contact hours lab:

Current Catalog Description (include all prerequisites):

Proposed or New Catalog Description (include all prerequisites):

The course is an exploration of issues facing rural areas and the impacts of those issues on conducting business. The focus will include agriculturally dependent cooperatives with particular emphasis given to issues most relevant to Montana. The course will incorporate the NARFI clearinghouse to conduct environmental scans and predict potential scenarios.

Prerequisites: Junior standing

Course Outcome Objectives:

- 1. Develop the tools to operate agriculturally dependent business in rural communities*
- 2. Demonstrate an ability to make practical decisions important to rural business management*
- 3. Demonstrate an understanding of the role cooperatives play in the Montana and U.S. economy and the key factors that result in successful cooperatives*
- 4. Develop the knowledge necessary to take a leadership role in rural communities for economic development*

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.