

COURSE & CURRICULUM COMMITTEE
MEETING MINUTES
OCTOBER 19, 2018

PRESENT: D. BERTCH, D. COATES, B. DE DIE, P. EAGAN, C. GIBSON, P. HENNING, S. GARDNER, A. NORD, K. SPARROW, H. STEVENS,
G. FREDERICKS, S. MYERS, B. REYNOLDS

ABSENT: D. COBLENTZ, S. HUBBELL, R. KRAAS, T. SYPRIS

GUESTS: D. BENARD, B. HAY, M. MYERS, B. PURDY

1. Call to Order - The meeting was called to order at 1:00 p.m.
2. Meeting Minutes of May 11, 2018 – The minutes of May 11, 2018 were approved as distributed.
3. Review/Revise/Approve Agenda – The agenda was approved as distributed.
4. Announcements/Updates – None presented.
5. Business
 - 5.1 Course Inactivations (Effective 202010)
 - 5.1.1 **BREW 150, Yeast Ferment & Microbiology, 4-3-3 (Lecture/Standard Lab)** – B. Hay discussed the recommendation to inactivate BREW 150, Yeast Ferment & Microbiology, 4-3-3 (Lecture/Standard Lab) and add two new courses, BREW 151, Biochemistry of Brewing and BREW 152, Microbiology of Brewing, in its place (see 5.3.3 and 5.3.4). This course inactivation has been endorsed by the BREW faculty and advisory committee. After discussion it was **MOVED, SECONDED, and CARRIED** to inactivate BREW 150, Yeast Ferment & Microbiology, 4-3-3 (Lecture/Standard Lab).
 - 5.1.2 **DHY 291, Dental Hygiene Clinical Review, 1-0-0 (Independent Study)** – P. Henning discussed the recommendation to inactivate DHY 291, Dental Hygiene Clinical Review, 1-0-0 (Independent Study) reporting this course has not been offered in many years and has been replaced with a board certification course in the new curriculum (DHY 264, Board Exam Prep). This course inactivation has been endorsed by the DHY faculty and advisory committee. After discussion it was **MOVED, SECONDED and CARRIED** to inactivate DHY 291, Dental Hygiene Clinical Review, 1-0-0 (Independent Study).
 - 5.1.3 **EMT 201, Prehospital Emergency Med I, 5-4-2 (Lecture/Standard Lab)**
 - 5.1.4 **EMT 211, Prehospital Emergency Pharm, 5-4-2 (Lecture/Standard Lab)**
 - 5.1.5 **EMT 215, Introductory EMS Clinical, 2-0-6 (Lecture/Open Lab/Clinic)**
 - 5.1.6 **EMT 221, Medical Emergencies, 4-3-2 (Lecture/Standard Lab)**
 - 5.1.7 **EMT 225, Medical Emergencies Clinical, 2-0-6 (Clinic)**
 - 5.1.8 **EMT 231, Trauma & Disaster Medicine, 5-4-2 (Lecture/Standard Lab)**
 - 5.1.9 **EMT 235, Trauma Rotation, 2-0-6 (Clinic)**
 - 5.1.10 **EMT 241, Cardiovascular Emergencies, 5-4-2 (Lecture/Standard Lab)**
 - 5.1.11 **EMT 245, Cardiac Clinical Rotation, 2.5-0-7.5 (Clinic)**
 - 5.1.12 **EMT 251, Prehospital Emergency Med II, 4-3-2 (Lecture/Standard Lab)**
 - 5.1.13 **EMT 255, Specialized Care Rotation, 1.5-0-4.5 (Clinic)**

Items 5.1.3 – 5.1.13 – D. Benard discussed the recommendation to inactivate the above courses reporting these courses are part of a certificate program that will be inactivated after summer 2019. A restructured program with new courses (AAS only) will start in fall 2019. These course inactivations have been endorsed by the EMT faculty and advisory committee. After discussion it was **MOVED, SECONDED, and CARRIED** to endorse the EMT course inactivations as recommended and presented.

 - 5.1.14 **ESL 090, ESL - Listening Practice I, 3-3-0 (Lecture/Discussion)**
 - 5.1.15 **ESL 091, ESL - Grammar and Writing I, 3-3-0 (Lecture/Discussion)**
 - 5.1.16 **ESL 093, ESL - Reading I, 3-3-0 (Lecture/Discussion)**
 - 5.1.17 **ESL 101, ESL – Grammar and Writing II, 3-3-0 (Composition)**
 - 5.1.18 **ESL 103, ESL – Reading II, 3-3-0 (Lecture/Discussion)**

Items 5.1.14 – 5.1.18 – B. Reynolds discussed the recommendation to inactivate the ESL courses listed above reporting these courses have not been offered in many years. These course inactivations have been endorsed by the ENG faculty. After discussion it was MOVED, SECONDED, and CARRIED to endorse the recommendations as presented.

- 5.1.19 **HCR 119, Medical Language, 2-2-0 (Lecture/Discussion)** – P. Henning discussed the recommendation to inactivate HCR 119, Medical Language, 2-2-0 (Lecture/Discussion) reporting this course has not been offered in many years and is not part of any program of study. This course inactivation has been endorsed by the HCR faculty. After discussion it was MOVED, SECONDED, and CARRIED to inactivate HCR 119, Medical Language, 2-2-0 (Lecture/Discussion).
- 5.1.20 **HUM 291, World Mythology, 1-1-0 to 3-1-0 (Independent Study) (Online) – Replaced with HUM 205**
- 5.1.21 **PSY 102, Principles of Peer Support, 3-3-0 (Lecture/Discussion)**
- 5.1.22 **THR 101, Theatre Appreciation, 3-3-0 (Lecture/Discussion)**
- 5.1.23 **THR 111, Fundamentals of Acting I, 3-3-0 (Lecture/Discussion)**
- 5.1.24 **THR 112, Intermed/Adv Acting Techniques, 3-3-0 (Lecture/Discussion)**
- 5.1.25 **THR 160, Intro to Technical Theatre I, 3-1-6 (Lecture/Standard Lab)**
- 5.1.26 **THR 161, Intro to Technical Theatre II, 3-1-6 (Lecture/Standard Lab)**
- 5.1.27 **THR 211, Directing I, 3-3-0 (Lecture/Discussion)**
- 5.1.28 **THR 278, Theatre Internship, 1-0-0 to 9-0-0 (Internship)**
- 5.1.29 **TRS 101, Transitions: Explore and Discover, 3-3-0 (Lecture/Discussion)** – Course content is offered in TRS 104

Items 5.1.20 – 5.1.29 – B. Reynolds discussed the recommendation to inactivate the courses listed above stating these courses have not been offered in many years. These course inactivations have been endorsed by faculty in each active discipline. After discussion it was MOVED, SECONDED, and CARRIED to endorse the recommendations as presented.

5.2 Course Revisions (Effective 202010)

- 5.2.1 **ANM 131, Intro to 3D Animation, 3-2-3 (Lecture/Standard Lab)** – Change title to 3D Animation I – B. Purdy discussed the recommendation to change the title of ANM 131 to 3D Animation reporting course content was changed to better fit the Animation curriculum. This course revision was endorsed by the ANM faculty and advisory committee. After discussion it was MOVED, SECONDED, and CARRIED to endorse the recommendation as presented.
- 5.2.2 **DHY 241, Dental Materials, 2-1-3 (Lecture/Standard Lab)** – Change title to Dental Materials & Specialties – P. Henning discussed the recommendation to change the title of DHY 241 to Dental Materials & Specialties reporting this title change better reflects outcomes. This title change has been endorsed by the DHY faculty and advisory committee. After discussion it was MOVED, SECONDED, and CARRIED to endorse the recommendation as presented.
- 5.2.3 **DHY 258, Community Dental Hygiene II, 2-1-3 (Lecture/Open Lab)** – Change strategy to 2-1-3 (Lecture/Field Work) – P. Henning discussed the recommendation to change the strategy of this course to 2-1-3 (Lecture/Field Work) reporting this change better fits the experience for students. This strategy change has been endorsed by the DHY faculty and advisory committee. After discussion it was MOVED, SECONDED, and CARRIED to endorse the strategy change to 2-1-3 (Lecture/Field Work).
- 5.2.4 **DHY 268, Perio Enrichment, 1-0-0 (Self Instruction)** – Change strategy to 1-0-0 (Independent Study) – P. Henning discussed the recommendation to change the strategy of DHY 268, Perio Enrichment to 1-0-0 (Independent Study) reporting the change to independent study provides students with better direction. This strategy change has been endorsed by the DHY faculty and advisory committee. After discussion it was MOVED, SECONDED, and CARRIED to endorse the strategy change to 1-0-0 (Independent Study).

- 5.3 New Courses (Effective 202010 unless otherwise noted)
- 5.3.1 **ANM 211, Motion Graphics & Comics, 3-2-3 (Lecture/Standard Lab)** – B. Purdy discussed the recommendation of adding ANM 211, Motion Graphics & Comics, 3-2-3 (Lecture/Standard Lab) to the Multi-Media/Video, AAS program offerings reporting this new course is ANM based and will replace ANM 141, a graphic design based course. This new course has been endorsed by the ANM faculty and advisory committee. After discussion it was **MOVED, SECONDED, and CARRIED** to endorse the recommendation as presented.
- 5.3.2 **ANM 231, 3D Animation II, 3-2-3 (Lecture/Standard Lab)** – This new course will serve as a more appropriate capstone option for students enrolled in the Animation & Game Art, AAS program of study and replaces ANM 282, Design Crew Merit. This new course has been endorsed by the ANM faculty and advisory committee. After discussion it was **MOVED, SECONDED, and CARRIED** to recommend this new course be added to the ANM offerings.
- 5.3.3 **BREW 151, Biochemistry of Brewing, 2-2-0 (Lecture/Discussion)**
- 5.3.4 **BREW 152, Microbiology of Brewing, 2-1.5-1.5 (Lecture/Standard Lab)**
- BREW 151, Biochemistry of Brewing and BREW 152, Microbiology of Brewing replace BREW 150, Yeast Ferment & Microbiology in the Sustainable Brewing curriculum. These new courses will transfer to WMU and provide additional flexibility for students transferring from WMU to complete Sustainable Brewing course work at KVCC. Credit hours do not change. Contact hours decrease from 6 to 5. After discussion it was **MOVED, SECONDED, and CARRIED** to add BREW 151, Biochemistry of Brewing and BREW 152 Microbiology of Brewing to the BREW offerings.
- 5.3.5 **PSI 126, Michigan Politics, 3-3-0 (Lecture/Discussion) (Effective 202010)** – Postponed.
- 5.4 Program Inactivations – None presented.
- 5.5 Program Revisions (Effective 202010 unless otherwise noted)
- 5.5.1 **Animation & Game Art, AAS** – Program changes accommodate the addition of ANM 131, 3D Animation I, and ANM 231, 3D Animation II and the removal of ANM 282, Design Crew Merit Course. These program revisions have been endorsed by the ANM faculty and advisory committee. After discussion it was **MOVED, SECONDED, and CARRIED** to endorse the revisions to the Animation & Game Art, AAS.
- 5.5.2 **Computer Aided Design, AAS** – Program changes accommodate the addition of MATH 150, College Algebra as an “or” option for those planning to attend WMU. This program addition has been endorsed by the EDMT faculty and advisory committee. After discussion it was **MOVED, SECONDED, and CARRIED** to endorse the revisions to the Computer Aided Design, AAS.
- 5.5.3 **Dental Hygiene, AAS** – Program changes accommodate the title revision of DHY 241, Dental Material & Specialties. The revisions to the Dental Hygiene, AAS have been endorsed by the DHY faculty and advisory committee. After discussion it was **MOVED, SECONDED, and CARRIED** to endorse the revisions to the Dental Hygiene, AAS.
- 5.5.4 **Engineering Technology, AAS** – Program changes accommodate the addition of EDMT 103, Fundamentals Machine Tool Ops, and removal of ELT 103, Industrial Electronics and MATH 106, Technical Mathematics. H. Stevens reported the program updates were made to reflect the partnership with WMU and create a clearer path for transferability. The revisions to the Engineering Technology, AAS have been endorsed by the EDMT faculty and advisory committee. After discussion it was **MOVED, SECONDED, and CARRIED** to endorse the recommendations as presented.
- 5.5.5 **Fire Science, AAS** – Program changes accommodate the addition of EMT 105, Medical First Responder, EMT 111, EMT Basic I and EMT 112, EMT Basic II. The revisions to the Fire Science, AAS have been endorsed by the Fire Science faculty and advisory committee. After discussion it was **MOVED, SECONDED, and CARRIED** to endorse the revisions to the Fire Science, AAS program of study.

- 5.5.6 **Multi-Media/Video, AAS** – Program changes accommodate the removal of ANM 141, Graphic Design and the addition of ANM 211 Motion Graphics & Comics. The revisions to the Multi-Media/Video, AAS have been endorsed by the ANM faculty and advisory committee. After discussion it was MOVED, SECONDED, and CARRIED to endorse the revisions to the Multi-Media/Video, AAS program of study.
- 5.5.7 **Sustainable Brewing, AAS** – Program changes accommodate the removal of BREW 150, Yeast Ferment & Microbiology and the addition of BREW 151, Biochemistry of Brewing and BREW 152, Microbiology of Brewing. The revisions to the Sustainable Brewing, AAS have been endorsed by the BREW faculty and advisory committee. After discussion it was MOVED, SECONDED, and CARRIED to endorse the revisions to the Sustainable Brewing, AAS program of study.
- 5.5.8 **Sustainable Brewing, CERT** – Program changes accommodate the removal of BREW 150, Yeast Ferment & Microbiology and the addition of BREW 151, Biochemistry of Brewing and BREW 152, Microbiology of Brewing. The revisions to the Sustainable Brewing, AAS have been endorsed by the BREW faculty and advisory committee. After discussion it was MOVED, SECONDED, and CARRIED to endorse the revisions to the Sustainable Brewing, CERT program of study.
- 5.6 New Programs - None presented.
- 5.7 Other
 - 5.7.1 **Guided Pathway Mapping** – P. Eagan brought forward a recommendation to bring to this group Guided Pathways Mapping as part of the course and curriculum review process. All present agreed to the recommendation. Guided Pathways recommendations will go through K. Sparrow to be brought to this group.
- 5.8 Upcoming Meetings – Our next meeting will be on November 16, 2018 at 1 PM in Room 4380
2018/2019 Fall Meetings: December 14, 2018 at 1 PM – Room 4380
- 5.9 Adjourn – The meeting adjourned at 1:34 p.m.

Future Agenda Items:

FRL 130, Beginning Spanish I, 2-2-0 (Lecture/Discussion) – Inactivation

**Animation & Game Art
Associate of Applied Science**

Program Requirements (48 credits)

<u>Course # Title</u>	<u>Credits</u>
ANM 100 Adobe Creative Suite	3
ANM 103 History Animation/Gaming/TBM	3
ANM 111 2D Animation	3
ANM 120 Bus Practices/Creative Careers	3
ANM 131 3D Animation I	3
ANM 132 Character Design	3
ANM 142 Adobe Photoshop	3 – OR
ANM 143 Adobe Illustrator	3
ANM 171 Video Production	3
ANM 172 Audio Production	3
ANM 173 Storyboarding	3
ANM 201 Prof Practices in New Media	3 – OR
ANM 282 Design Crew Merit Course	3
ANM 231 3D Animation II	3
ANM 219 Experimental Animation	3
ANM 250 Digital Painting	3 – OR
ANM 251 Drawing Human Figure Motion	3
ART 101 2D Design & Color Theory	3
ART 103 Drawing & Composition I	3
ART 212 Life Drawing	3

General Education Requirements (18-19 credits)

<u>Course # Title</u>	<u>Credits</u>
ENG 110 College Writing I	3 – OR
ENG 160 College Writing & Research	4
ENG 112 Writing for the Workplace	3 – OR
COM 113 Interpersonal Communication	3
COM 101 Public Speaking	3
MATH 115 Math for the Liberal Arts	4
Social Science ¹	3
Wellness/Physical Education ²	<u>2</u>
Total Credits	66-67

Effective: 202010

Board Approval Date: _____

¹ Social Science Elective (3) = **AGF** 110; **ECO** 110, 201, 202, 240; **GEO** 102; **HRY** 100, 101, 102, 103, 104, 207, 210, 212, 200, 230, 240, 251, 252, 260; **HUM** 150; **PSI** 100, 101, 102, 201, 202, 250; **PSY** 150, 160, 170, 190, 240, 250, 260; **SOC** 102, 103, 105, 106, 170, 200, 201, 202, 205, 207, 261, 273

² WPE Elective (2) = **WPE** @

COMPUTER AIDED DESIGN
Associate of Applied Science

Program Requirements (44 Credits)

<u>Course # Title</u>	<u>Credits</u>
CIS 100 Beginning Computer Skills	2
EDMT 101 Trends in Manufacturing	3
EDMT 103 Fundamentals Machine Tool Ops	4
EDMT 130 Tech Drawing w/AutoCAD	4
EDMT 140 Production Drafting/GD&T	3
EDMT 145 Descriptive Geometry	3
EDMT 160 PRO-E/CREO	3 – OR
EDMT 165 Inventor	3 – OR
EDMT 171 SolidWorks	3
EDMT 210 Kinematics of Mechanisms	3
EDMT 215 Statics Strength of Materials	4
EDMT 225 Comp Aided Simulation w/FEA	3
EDMT 245 Machine Design	4
EDMT 260 Metallurgy/Mechanical Testing	4
EDMT 270 CAD-CAM	4

General Education Requirements (18-19 Credits)

<u>Course # Title</u>	<u>Credits</u>
ENG 110 College Writing I	3 – OR
ENG 160 College Writing & Research	4
ENG 127 Technical Writing	3
MATH 106 Technical Mathematics	4 – OR
MATH 150 College Algebra	4
Political Science ¹	3
Social Science ²	3
Wellness/Physical Education ³	<u>2</u>

Total Credits 62-63

Effective Date: 202010

Board Approval Date: _____

¹ Political Science Elective (3) = **PSI** 100, 101, 102

² Social Science Elective (3) = **ECO** 110, 201, 202, 240; **GEO** 102; **HRY** 100, 101, 102, 103, 104, 207, 210, 212, 220, 230, 240, 251, 252, 260; **PSI** 100, 101, 102, 201, 202, 250; **PSY** 150, 160, 170, **180**, 190, 250, 260; **SOC** 102, 103, 105, 106, 170, 200, 201, 202, 205, 207, 261, **273**

³ WPE Elective (2) = **WPE** @

DENTAL HYGIENE
Associate of Applied Science

Program Requirements (20 credits)

<u>Course #</u>	<u>Title</u>	<u>Credits</u>
BIO 110	Anatomy & Physiology	4
BIO 130	Micro & Infectious Disease	4
BIO 210	Human Physiology	4
CHM 100	Fundamentals of Chemistry	4
ENG 160	College Writing & Research	4

Program Requirements (51 credits)

COM 113	Interpersonal Communication	3
DHY 111	Anatomy, Embryology, Histology	2
DHY 113	Dental Imaging Techniques	1
DHY 114	Oral Pathology	2
DHY 119	Dental Hygiene Pre-Clinic	5
DHY 120	Oral Health Care	2
DHY 123	Dental Imaging Interpretation	1
DHY 124	Periodontology	3
DHY 129	Clinical Dental Hygiene I	4
DHY 131	Anatomy of the Head & Neck	2
DHY 139	Clinical Dental Hygiene II	3
DHY 241	Dental Material & Specialties	2
DHY 242	Orofacial Myology	1
DHY 244	Pain Management	2
DHY 248	Community Dental Hygiene I	1
DHY 249	Clinical Dental Hygiene III	5
DHY 251	Ethics, History, Jurisprudence	1
DHY 256	Pharmacology	2
DHY 258	Community Dental Hygiene II	2
DHY 259	Clinical Dental Hygiene IV	5
DHY 264	Board Exam Preparation	<u>2</u>
Total Credits:		71

Effective: 202010

Board Approval Date: _____

ENGINEERING TECHNOLOGY
Associate of Applied Science

Program Requirements (44 credits)

<u>Course #</u>	<u>Title</u>	<u>Credits</u>
CHM 120	General Chemistry I	4
EDMT 101	Trends in Manufacturing	3
EDMT 103	Fundamentals Machine Tool Ops	4
EDMT 130	Tech Drawing w/AutoCAD	4
EDMT 215	Statics Strength of Materials	4
EDMT 260	Metallurgy/Mechanical Testing	4
ELT 102	Applied Electricity	4
ELT 103	Industrial Electronics	4
ELT 120	Electrical Machines	3
MATH 152	Trigonometry	3
PHY 111	College Physics I	4
PHY 112	College Physics II	4
	Program Electives ¹	3

General Education Requirements (18-19 credits)

<u>Course #</u>	<u>Title</u>	<u>Credits</u>
ENG 110	College Writing I	3 – OR
ENG 160	College Writing & Research	4
ENG 127	Technical Writing	3
MATH 106	Technical Mathematics	4 OR
MATH 150	College Algebra	4
	Political Science ²	3
	Social Science ³	3
	Wellness/Physical Education ⁴	2
Total Credits		62-63

Effective Date: 202010

Board Approval Date: _____

¹ Program Electives (4) = ACC 101; ~~EDMT 103, 104~~; 120, 125, 145; ECO 202; **MATH 160**

² Political Science Elective (3) = PSI 100, 101, 102

³ Social Science Elective (3) = ECO 110, 201, 202, 240; GEO 102; HRY 100, 101, 102, 103, 104, 207, 210, 212, 220, 230, 240, 251, 252, 260; PSI 100, 101, 102, 201, 202, 250; PSY 150, 160, 170, ~~180~~, 190, 250, 260; SOC 102, 103, 105, 106, 170, 200, 201, 202, 205, 207, 261, ~~273~~

⁴ WPE Elective (2) = **WPE @**

FIRE SCIENCE
Associate of Applied Science

Program Requirements (47 credits)

<u>Course # Title</u>	<u>Credits</u>
BUS 207 Organizational Behavior	3 – OR -
BUS 263 Supervision	3
CHM 100 Fundamentals of Chemistry	4
EMT 110 Basic Emergency Medical Tech	9 – OR -
EMT 105 Medical First Responder	3 – AND –
EMT 111 EMT Basic I	3 – AND –
EMT 112 EMT Basic II	3
EMT 115 EMT Clinical	1
FIRE 102 Firefighter II	12
FIRE 110 Fire Prevention	3
FIRE 111 Building Construction	3
FIRE 112 Fire Service Tactics	3
FIRE 210 Fire Cause Determination	3
FIRE 211 Instructional Techniques	3
FIRE 212 Incident Management	3

General Education Requirements (16-25 credits)

<u>Course # Title</u>	<u>Credits</u>
ENG 110 College Writing I	3 – OR
ENG 160 College Writing & Research	4
ENG 127 Technical Writing	3
PSY 150 Introductory Psychology	3 – OR –
SOC 102 Principles of Sociology	3 – OR –
FIRE 278 Fire Science Internship	1 to 9
Mathematics/Science ¹	4
Political Science ²	3
Wellness/Physical Education ³	2
Total Credits	63-72

Effective Date: 202010

Board Approval Date: _____

¹ Math/Science Elective (4) = **BIO** 100, 101, 104, 105, 110, 120, 121, 130, 201, 210; **BUS** 102; **CHM** 120, 130, 150, 220, 230, 250; **GEO** 110, 120; **MATH** 106, 115, 116, 120, 150, 152, 156, 158, 160, 162, 216, 220, 260, 264; **PHY** 100, 111, 112, 120, 124, 221, 222

² Political Science Elective (3) = **PSI** 100, 101, 102

³ WPE Elective (2) = **WPE @**

MULTI-MEDIA/VIDEO
Associate of Applied Science

Program Requirements (48 credits)

<u>Course # Title</u>	<u>Credits</u>
ANM 100 Adobe Creative Suite	3
ANM 103 History Animation/Gaming/TBM	3
ANM 120 Bus Practices/Creative Careers	3
ANM 141 Graphic Design	3
ANM 142 Adobe Photoshop	3
ANM 171 Video Production	3
ANM 172 Audio Production	3
ANM 173 Storyboarding	3
ANM 174 Script Writing	3
ANM 186 Multimedia	3
ANM 201 Prof Practices in New Media	3 – OR
ANM 282 Design Crew Merit Course	3
ANM 211 Motion Graphics & Comics	3
ANM 219 Experimental Animation	3 – OR
ART 219 Studio Lighting	3
ANM 271 Advanced Video Production	3
ART 101 2D Design & Color Theory	3
ART 133 Intro to Digital Photography	3
ART 215 Advanced Digital Photography	3

General Education Requirements (18-19 credits)

<u>Course # Title</u>	<u>Credits</u>
ENG 110 College Writing I	3 – OR
ENG 160 College Writing & Research	4
ENG 112 Writing for the Workplace	3 – OR
COM 113 Interpersonal Communications	3
COM 101 Public Speaking	3
MATH 115 Math for the Liberal Arts	4
Social Science ¹	3
Wellness/Physical Education ²	<u>2</u>
Total Credits	66-67

Effective Term: 202010

Board Approval Date: _____

¹ Social Science Elective (3) = **AGF** 110; **ECO** 110, 201, 202, 240; **GEO** 102; **HRY** 100, 101, 102, 103, 104, 207, 210, 212, 220, 230, 240, 251, 252, 260; **HUM** 150; **PSI** 100, 101, 102, 201, 202, 250; **PSY** 150, 160 170, 190, 240, 250, 260; **SOC** 102, 103, 105, 106, 170, 200, 201, 202, 205, 207, 261, 273

² WPE Elective (2) = **WPE** @

SUSTAINABLE BREWING

Associate of Applied Science

Program Requirements (43 – 51 credits)		Credits
<u>Course</u>	<u>Title</u>	
ACC 101	Principles of Accounting	4 – OR -
BUS 101	Business Principles/Practices	3
AGF 105	Food Industry Career Planning	2
AGF 110	Intro Sustainable Food Systems	3
AGF 120	Summer/Fall Crops Practicum	2 – OR -
AGF 140	Winter Crops Practicum	2
BREW 110	Brewing History & Introduction	2
BREW 130	Materials, Malting & Mashing	3
BREW 140	Recipe, Process & Technology	4
BREW 150	Yeast Ferment & Microbiology	4
BREW 151	Biochemistry of Brewing	2
BREW 152	Microbiology of Brewing	2
BREW 160	Styles Sensory & Food Pairing	3
BREW 170	Fermenting & Finishing Tech	3
BREW 225	Brewing Practicum	2
BREW 230	Packaging & Distribution	3
BREW 250	Brewing Quality Control	2
BREW 275	Brewing Internship	2 – 9
CUL 100	Food Safety Essentials	3
	Program Electives ¹	3
General Education Requirements (19 – 20 credits)		
ENG 110	College Writing I	3 – OR -
ENG 160	College Writing & Research	4
ENG 112	Writing for the Workplace	3 – OR -
COM 210	Fundamental Prof Communication	3
CHM 100	Fundamentals of Chemistry	4 – OR -
CHM 120	General Chemistry I	4
MATH 105	Culinary & Food Industry Math	3
WPE 130	Nutrition for Health	3
	Political Science ²	3
Total Credits:		62-71

Effective Term: 202010

Board Approved Date: _____

¹Program Elective (3) = ACC 101, 102; AGF 120, 140; ANM 100; BUS 101, 115; CUL 106, 110, 130; EDMT 103; WELD 120

²Political Science Elective (3) = PSI 100, 101, 102

**SUSTAINABLE BREWING
CERTIFICATE**

<i>Program Required Courses</i>		<u>Credits</u>
BREW 110	Brewing History & Introduction	2
BREW 130	Materials, Malting & Mashing	3
BREW 140	Recipe, Process & Technology	4
BREW 150	Yeast Fermentation & Micro	4
BREW 151	Biochemistry of Brewing	2
BREW 152	Microbiology of Brewing	2
BREW 160	Styles, Sensory & Food Pairing	3
BREW 170	Fermentation & Finishing Tech	3
BREW 210	Brewing Practicum I	1
BREW 220	Brewing Practicum II	1
BREW 230	Packaging & Distribution	3
BREW 250	Brewing Quality Control	2
BREW 275	Brewing Externship	2 - 9
CUL 100	Food Safety Essentials	2
Total Credits		<u>30 - 37</u>

Board Approved Date: _____

For Semester: _____