

March 9-10, 2017

ITEM 174-1601-R0317

Request for authorization to establish a Minor, Certificate, A.A., and a B.A. in Glass

THAT

The University of Montana Western requests authorization from the Montana Board of Regents to establish a minor, certificate, associate of arts, and a bachelor of arts in Glass.

EXPLANATION

Workforce opportunities in glass work and blowing is growing across the nation. Since Montana is encircled by eleven states that do not offer a degree in glass and UMW would be the only four-year institution offering a specialization in scientific glassblowing in the nation, there is great potential for enrollment growth from students seeking this expertise in both the fields of science and art.

ATTACHMENTS

- Academic Proposal Request Form
- Curriculum Proposal
- Intent to Plan
- Attachment #1- Outline of Certificate, Minor, A.A., and B.A.
- Attachment #2- Annual Courses Offered in Glass
- Attachment #3- Map of Glass Programs Throughout the Nation

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

ITEM 174-1601-R0317 Submission Month or Meeting: March 9-10, 2017

Institution: The University of Montana
Western CIP Code: 50.0799

Program/Center/Institute Title: Minor, Certificate, A.A., and a B.A. in Glass

Includes (please specify below): Online Offering _____ Options _____

Please mark the appropriate type of request and submit with an Item Template and any additional materials, including those listed in parentheses following the type of request. For more information pertaining to the types of requests listed below, how to complete an item request, or additional forms please visit <http://mus.edu/che/arsa/preparingacademicproposals.asp>.

 A. Level I:

Campus Approvals

- 1a. Placing a postsecondary educational program into moratorium** (Program Termination and Moratorium Form)
- 1b. Withdrawing a postsecondary educational program from moratorium**
- 2. Establishing, re-titling, terminating or revising a campus certificate of 29 credits or less**
- 3. Establishing a B.A.S./A.A./A.S. area of study**
- 4. Offering an existing postsecondary educational program via distance or online delivery**

OCHE Approvals

- 5. Re-titling an existing postsecondary educational program**
- 6. Terminating an existing postsecondary educational program** (Program Termination and Moratorium Form)
- 7. Consolidating existing postsecondary educational programs** (Curriculum Proposal Form)
- 8. Establishing a new minor where there is a major or an option in a major** (Curriculum Proposal Form)
- 9. Revising a postsecondary educational program** (Curriculum Proposal Form)
- 10. Establishing a temporary C.A.S. or A.A.S. degree program** *Approval limited to 2 years*

Montana Board of Regents
ACADEMIC PROPOSAL REQUEST FORM

X **B. Level II:**

- X **1. Establishing a new postsecondary educational program**
(Curriculum Proposal and Completed Intent to Plan Form)
- 2. Exceeding the 120 credit maximum for baccalaureate degrees** *Exception to policy 301.11*
- 3. Forming, eliminating or consolidating an academic, administrative, or research unit** (Curriculum or Center/Institute Proposal and Completed Intent to Plan Form, except when eliminating or consolidating)
- 4. Re-titling an academic, administrative, or research unit**

Specify Request:

The University of Montana Western intends to establish a Minor, Certificate, A.A., and a B.A. in Glass.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

1. Overview

A. Provide a one paragraph description of the proposed program. Be specific about what degree, major, minor or option is sought.

Proposed is a Glass Program that will offer stackable degrees: certificate, associate, minor and BA. This Curriculum Proposal (CP) would expand The University of Montana Western's (Western) coursework beyond the three courses we currently offer, to include all disciplines of glassworking: furnace glass, torch-worked (including scientific glassblowing and artistic), fusing, casting (hot and kiln), and coldworking. These disciplines will function to advance the careers of Western's students in commercial and fine arts, entrepreneurship, teaching, arts management (artistic directors, curators, gallerists, etc.), technical careers in scientific glassblowing, and will benefit cross disciplinary science students whose prospective job placement potential will be enriched from the knowhow of scientific glassblowing (chemists, biologists, physicists, etc.).

2. Institutional and System Fit

A. What is the connection between the proposed program and existing programs at the institution?

The proposed program in glass is an expansion and development of the already existing courses and facilities at Western. Western currently offers three courses in glassblowing. These classes contribute to a student's degree, which is currently a BA with an option in Art. This proposed CP in Glass would expand the course offerings so that a student can tailor their interest to the appropriate level of commitment: certificate, associate, minor, or BA degree.

B. Will approval of the proposed program require changes to any existing programs at the institution? If so, please describe.

No, it would not.

C. Describe what differentiates this program from other, closely related programs at the institution (if appropriate).

There are no other programs similar to this one on this campus, nor in the state or region. This program will be unique to Western. Western is encircled by 10 other states that do not offer a degree in glass. Moreover, there are only two other schools in the United States that offer degrees in scientific glassblowing, in Arizona and New Jersey.

D. How does the proposed program serve to advance the strategic goals of the institution?

In accordance with the Strategic Plan of Western, the following correspond to the intentions set forth therein:

- Success (recruitment): The Glass Program offers Western a unique recruiting opportunity to attract students from Montana and the surrounding states (Oregon, Nevada, Idaho, Utah, Wyoming, Colorado, New Mexico, North Dakota, South Dakota, and Oklahoma) whom otherwise do not have a regional option to study and work with glass.
- Development: The development of the Glass Program makes use of preexisting resources and facilities at Western in order to help students pursue creative and fulfilling career paths.

Priority One:

- 1A: The program offers five general education classes which are innately experiential.
- The program offers courses that:

Montana Board of Regents

CURRICULUM PROPOSAL FORM

- 1D: Teach the student how to start and maintain their own studio.
- 1B, 1C: Allow the students to obtain knowledge and understanding by directly engaging with the thinking and making processes.
- 1F, 1C: Help students directly develop professional artistic practices by working with companies, cities, agencies, etc., to install public or private artworks.
- 1F: Invite visiting artists to come to Western to teach for a block, providing the students, teacher, and Western community new and innovative approaches to making and thinking.

Priority Two:

- 2A: The program is cross disciplinary, offering future artists, scientists, and larger Western community opportunities to interact and innovate.
- 2B: Students learn to interact with the community beyond Western by developing individually driven professional experiences in order to make, promote and place their product.

Priority Three:

- 3A: Western has developed a system in order to ensure enrollments are met (specifically in the upper division courses with smaller enrollments) by combining multiple level classes into one class period.
- 3B: Annual promotion and recruitment efforts at appropriate venues (symposia, conferences, college fairs, high schools, etc.) have already been enacted and are presently continuing.
- 3C: The recruitment efforts previously mentioned are in larger cities with diverse demographics.

Priority Four:

- 4A: The support shown to advance this curriculum proposal is evidence of Western's efforts to help faculty "act on their commitments to excellence."
- 4B: The nature of the art-studio-class-environment is such that diversity and difference are welcome and encouraged to inspire new and valuable perspectives and outcomes.

Priority Five:

- 5B: Western has approved funding in order to compliment and expand the preexisting glass studios, and to accommodate new working methods: a dedicated torchworking facility.
- 5C: The web design and development team is currently working to detail and create a webpage on Western's site to promote the glass classes and facilities.

Priority Six:

- 6A: Western currently conserves energy and resources by only utilizing equipment as needed, minimizing the financial impact and freeing those resources for other efforts.
- 6B: Western just received funding from an approved Perkins Grant proposal in order to expand the equipment of the glass facilities.
- 6C: Alumni have been invited back to Western to demonstrate and interact with our students.

Priority Seven:

- 7A: Should this curriculum proposal be approved, Western will have another niche program to promote and help to continue to distinguish it as an institution with unique opportunities.
- 7B: Western's marketing department and web team is currently developing a webpage in order to promote the current glass facilities and classes, and is working, in anticipation of the approval of this proposal, to be able to then alter that webpage in order to promote a full glass program.

E. Describe the relationship between the proposed program and any similar programs within the Montana University System. In cases of substantial duplication, explain the need for the proposed program at an additional institution. Describe any efforts that were made to collaborate with these similar programs; and if no efforts were made, explain why. If articulation or transfer agreements have been developed for the substantially duplicated programs, please include the agreement(s) as part of the documentation.

This proposed Glass Program would be the only one of its kind in the MUS system, and in the region.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

3. Program Details

- A. Provide a detailed description of the proposed curriculum. Where possible, present the information in the form intended to appear in the catalog or other publications. NOTE: In the case of two-year degree programs and certificates of applied science, the curriculum should include enough detail to determine if the characteristics set out in Regents' Policy 301.12 have been met.**

Please see the attached documents: *Annual Courses Offered in Glass*, *Glass Program course listings*, *Suggested Plans of Study* for a certificate, associate, minor, and BA.

- B. Describe the planned implementation of the proposed program, including estimates of numbers of students at each stage.**

The projected plan to implement this program is organized in the attached *Annual Courses Offered in Glass* document. The document shows that the Glass Program would continue to utilize the consolidated class system developed at Western to account for its smaller student body. This system allows Western to still offer necessary but smaller upper division classes to its students. Western accomplishes this task by combining multiple level classes into one block setting. This practice of offering the consolidated-multi-level glass classes currently available to Western students has been consistently sought and attended with enrollment caps just recently increased from 15 to 20 to accommodate demand. We plan to keep those caps if this program is approved. The point at which the courses exceed 20 students is when we discussed looking to hire more faculty to accommodate that increased demand.

4. Need

- A. To what specific need is the institution responding in developing the proposed program?**

We are responding to a shortage of *supply* of institutions in the United States and regionally that offer courses in glass arts and scientific glassworking. As previously mentioned, Western would be one of only two other institutions to offer degrees in scientific glass blowing. It would also be the only Glass Program in the Montana University System, as well as the only one in the encircling 10 state region.

On the *demand* side of the equation, we are responding to the continued high enrollment in glass classes at Western and positive student feedback and interest from students in glass making. Western has offered classes in glass for the past 41 years, and the demand continues to grow as evidenced in enrollment and recently increased enrollment caps.

Research was conducted in the forming of this proposal with The University of Washington, Princeton University, Tyler School of Art at Temple University, Cal State-Fullerton, and Salem Community College (one of the two scientific programs in the United States). Salem CC confirms a consistently high demand for glass courses, which are often either filled or overfilled. They boast a near 100% job placement rate for scientific glass students into national labs, pharmaceutical companies, private practices, and academic institutions. They also have a regular waitlist of 10 applicants, and deny many others.

Montana Board of Regents
CURRICULUM PROPOSAL FORM

B. How will students and any other affected constituencies be served by the proposed program?

The glass program at Western would offer the students, and other interested parties, the ability to attend classes in a cross disciplinary field which can lead to many career choices in the arts and sciences:

- Scientists can separate themselves from other qualified resumes with the added knowledge-set of scientific glass blowing.
- There is a confirmed high demand and placement in the scientific glass working industry (per Salem Community College's statistics).
- The careers in the glass arts are numerous, previously mentioned in the answer to question 1A, and in addition, the research conducted with the aforementioned institutions that place graduates with careers in commercial glass studios, lighting, work as a glazier, custom design and fabrication work, staff at galleries and museums, teaching (high school, private and public studios, and universities), advance to receive graduate degrees, establish private studios, architectural collaborations, write for national publications, become glass jewelers, cold-workers (those who grind, polish, detail and design glass after it is in the cold-state), stained glass artists, etc.

In sum, the program will provide Western and the surrounding communities and states the opportunity to develop skills in specialized trades of the glass arts that engage the participant to advance their creativity and critical thinking. The National Governor's Association Center for Best Practices says: "To compete in today's economy, a robust creative sector is necessary. The United States economy relies heavily on services, information, technology and intellectual property. Along with the increasing dominance of these enterprises comes the need for greater creativity and innovation in the workforce...The arts and cultural sectors are proven anchors for attracting and improving these assets. Investment in the arts may be among the most innovative workforce development tools at the disposal of state governments."ⁱ This Glass Program would provide Western, and its nearby community members, a forum in which creativity is paramount and is critically cultivated. Graduates of this program then insert that original thought and innovative thinking into the workforce.

C. What is the anticipated demand for the program? How was this determined?

We anticipate the demand for the program, if approved, to, at the onset of the program, be similar to its current demand, which is currently full and overfilled for Fall 2016. As the program progresses, we expect the enrollment to increase because the frequency of course offerings in glass will increase from two classes per year, to six classes per year. This continuity will provide the students the ability to gain a stronger proficiency in this subject matter, and help keep the embers burning, so to speak, if they find an interest in glass arts.

Nancy Rowley and Alecia McDougal, in the registrar's office, continually receive enthusiastic feedback and interest from students about the glass classes. Consistently positive feedback and interest in glass courses is also documented in the students' class evaluations.

Data from the institutions mentioned above state a consistent demand for their glass classes, and an increase in the growth of their glass programs. To accommodate that growth, Tyler, Cal State-Fullerton and Salem CC have added courses and instructors to their programs.

5. Process Leading to Submission

Montana Board of Regents
CURRICULUM PROPOSAL FORM

A. Describe the process of developing and approving the proposed program. Indicate, where appropriate, involvement by faculty, students, community members, potential employers, accrediting agencies, etc.

In order to ensure that the level I Glass Program Curriculum Proposal was comprehensive and well considered, I placed counsel in Ewa Mastandrea - the Printing and Painting Chair, Delena Norris-Tull – Professor of Education, Interim Provost Sylvia Moore, Vice Chancellor Susan Briggs, Chancellor Beth Weatherby, the entire faculty senate and their respective departments, Registrar Charity Walters, Dean of Outreach Anneliese Ripley, and countless other faculty and staff who gave input and feedback on the Glass Curriculum Proposal. I am currently working with Provost Deb Hedeem and Registrar Charity Walters on the Level II form.

6. Resources

A. Will additional faculty resources be required to implement this program? If yes, please describe the need and indicate the plan for meeting this need.

No, the Glass Program will not need additional faculty members at this point. If the course enrollments begin to exceed 20 students, we will then reassess to determine if the demand merits hiring additional faculty.

B. Are other, additional resources required to ensure the success of the proposed program? If yes, please describe the need and indicate the plan for meeting this need.

No, Western has a fully functioning glass facility for hot, cold, warm and casting processes (both hot and kiln). Western is currently adding a dedicated studio space for torchworking, to be completed in February, 2017. This studio will provide students a facility in which they can develop both scientific glassblowing and artistic practices on the torch. Western is equipped to expand into the projected program this proposal details.

7. Assessment

A. How will the success of the program be measured?

The Glass Program has to maintain high enrollment numbers in order to be sustainable, from the fiscal perspective of success. In terms of student performance, each course description (found on the *Glass Program Course Listings* document, at the end of each course description) details the manner in which the success of a student's performance will be measured within the program. Feedback in the class evaluations will give a glimpse of the student's idea of the program's success.

All of the courses also involve a critique after each project in order to assess the students' proficiency with the project's objective, and as a forum to discuss methods and working practices, the research that fuels the content of the projects, form, color, composition, etc., and how those factors contribute the artworks' effectiveness. This component of assessment helps the students not only cultivate better working practices, but also helps them to develop the vocabulary necessary to discuss the subject matter pertinent to their craft, and a comfortability in public speaking, all of which are considered in the students' performance in the class, and are also a marker for how well the program served the students to better themselves.

Ultimately, though, the success of the program will be the students who fill that space, who feel the passion of the material, who find their muse. When people find glass, it changes trajectories. I am looking for this program to change lives, to provide a place where students can finally settle into the calm that comes when you know you have found your calling. When I begin to see students turn this fledgling idea

Montana Board of Regents
CURRICULUM PROPOSAL FORM

from a proposal to careers of passion and excitement that is contagious and continuous, that is when I will feel comfortable in believing that everyone who came together and believed in this proposal enough to make it a reality were validated in their efforts.

ⁱ Montana: Land of Creativity the Power and Potential of Arts-Driven Economic Impact in Montana © Montana Arts Council, 2009

Glass Certificate

Glass Certificate Credit Requirements

ARTH 200 Art of World Civilization	4
ARTH 201 Art of World Civilization	4
ARTZ 191*a Introduction to Glassblowing and Sculpting	4
ARTZ 191b Introduction to Torch Working	4
ARTZ 191c Scientific Glass	4
ARTZ 291a Cold Fabrication	4
ARTZ 291b Fundamental Fusing, Casting, Pate de Verre	4

Select 1 course/4 credits from the following:

ARTZ 291c Intermediate Glassblowing and Sculpting	(4)
ARTZ 291e Intermediate Flame Working	(4)

GLASS CERTIFICATE TOTAL CREDITS

32

Glass Minor

Glass Minor Credit Requirements

Select 1 course/4 credits from the following:	
ARTZ 191*a Introduction to Glassblowing and Sculpting	(4)
ARTZ 191b Introduction to Torch Working	(4)
ARTZ 191c Scientific Glass	(4)

Select 1 course/4 credits from the following:

<i>Course must be the 200 level step from the previous selection</i>	
ARTZ 291c Intermediate Glassblowing and Sculpting	(4)
ARTZ 291d Intermediate Flame Working	(4)
ARTZ 291e Intermediate Scientific Glass	(4)

Select 1 course/4credits from the following:

<i>Course must be the 300 level step from the previous selection</i>	
ARTZ 391a Advanced Glassblowing and Sculpting	(4)
ARTZ 391b Encasements	(4)
ARTZ 391c Advanced Scientific Class	(4)
ARTZ 391d Advanced Cold Fabrication	(4)
ARTZ 391e Neon	(4)
ARTZ 391f Advanced Fusing, Casting & Pate de Verre	(4)

Select 2 courses/4 credits from the following

<i>Cannot be the same course completed for a previous section</i>	
ARTZ 291a Cold Fabrication	(4)
ARTZ 291b Fundamental Fusing, Casting, Pate de Verre	(4)
ARTZ 291c Intermediate Glassblowing and Sculpting	(4)
ARTZ 291d Intermediate Flame Working	(4)
ARTZ 291e Intermediate Scientific Glass	(4)

GLASS MINOR TOTAL CREDITS

20

Associate of Art- Glass

Credit Requirement

GENERAL EDUCATION 16

Written & Oral Communication 4

The remaining general education is tailored to the career goal of the student within the following general education categories. Work with advisor to select the remaining 12 credits from the following areas of General Education.

Math (4)
Behavioral and Social Science (4)
History (4)
Humanities: Expressive Arts (4)
Humanities: Literary Arts (4)
Natural Sciences (8)

MAJOR CORE 32

ARTH 200 Art of World Civilization I 4
ARTH 201 Art of World Civilization II 4
ARTH 350 Contemporary Art History and Theory 4
ARTZ 108 Visual Language 3-D Foundation 4
ARTZ 191a Introduction to Glassblowing and Sculpting 4
ARTZ 291c Intermediate Glassblowing and Sculpting 4

Select 1 course/4 credits from the following

ARTZ 105 Visual Language-Drawing (4)
ARTZ 106 Visual Language 2-D Foundation (4)

Select 1 course/4 credits from the following

ARTZ 191b Introduction to Torch Working (4)
ARTZ 191c Scientific Glass (4)

PROFESSIONAL ELECTIVES 12

Select 12 credits from the following:

ARTZ 291a Cold Fabrication (4)
ARTZ 291b Fundamental Fusing, Casting, Pate de Verre (4)
ARTZ 391a Advanced Glassblowing and Sculpting (4)
ARTZ 391b Encasements (4)
ARTZ 391e Neon (4)

AA-GLASS TOTAL CREDITS 60

Bachelor of Art in Glass

Credit Requirement

GENERAL EDUCATION 32

Complete the following for Humanities: Expressive Arts and Humanities: Literary Arts.

ARTH 200 Art of World Civilization I 4
ARTZ 105 Visual Language-Drawing 4

MAJOR CORE 36

ARTH 201 Art of World Civilization II 4
ARTH 350 Contemporary Art History and Theory 4
ARTZ 106 Visual Languages 2-D 4
ARTZ 108 Visual Languages 3-D Foundations 4

Select 1 course/4 credits from the following:

ARTZ 191a Introduction to Glassblowing and Sculpting (4)
ARTZ 191b Introduction to Torch Working (4)
ARTZ 191c Scientific Glass (4)

Select 4-8 credits from the following. If only four are completed in this area, eight must be completed in the ARTZ 300 in the next section.

ARTZ 291a Cold Fabrication (4)
ARTZ 291b Fundamental Fusing, Casting, Pate de Verre (4)
ARTZ 291c Intermediate Glassblowing and Sculpting (4)
ARTZ 291d Intermediate Flame Working (4)
ARTZ 291e Intermediate Scientific Glass (4)

Select 4-8 credits from the following. If only four are completed in this area, eight must be completed in the ARTZ 200 in the previous section.

ARTZ 391a Advanced Glassblowing and Sculpting (4)
ARTZ 391b Encasements (4)
ARTZ 391c Advanced Scientific Glass (4)
ARTZ 391d Advanced Cold Fabrication (4)
ARTZ 391e Neon (4)
ARTZ 391f Advanced Fusing, Casting & Pate de Verre (4)
ARTZ 391g Advanced Glass Concept-Visiting Artist Series (4)

Select 4 credits from the following:

ARTZ 490b Advanced Studio: Glass (4)
ARTZ 494a Art Seminar: Prof. Practices-Workshops Beyond Western (4)
ARTZ 494b Art Seminar: Prof Practices-Public Art (4)
ARTZ 494c Art Seminar: Prof Practices- Equip Building & Studio Mngt (4)
ARTZ 498 Internship (4)
ARTZ 499 Senior Exhibit and Thesis (4)

ELECTIVES 52

Choose elective credits from any college-level catalog courses to bring degree total to 120.

BA-GLASS TOTAL CREDITS 120

New ARTZ Courses Descriptions

ARTZ 191A INTRODUCTION TO GLASS-BLOWING AND SCULPTING (4)

This is an introductory class that will cover a broad breadth of topics and furnace worked techniques, including blowing, sculpting, coldworking and studio equipment operations. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content. This course will provide you with the comfortability to gather molten glass from a furnace, shape it, move safely through the studio, blow glass, sculpt glass, understand the working principals of glass and the teamwork required to produce glass, make work that is gallery-ready, use glass as an expressive material to convey ideas, rather than to just master technique, and have a grasp on contemporary art making methodologies.

ARTZ 191B INTRODUCTION TO TORCH WORKING (4)

This course introduces the principals of glass working with a bench torch. The students will learn how to make small sculpture, beads, pendants, marbles, and use tools such as graphite, heat, timing, and gravity, in order to form and develop your work. This course will focus on using and developing an understanding of how to torchwork with soda-lime glass. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content.

ARTZ 191C SCIENTIFIC GLASS (4)

This course will cover the fundamentals of torch working borosilicate glass in order to render scientific apparatuses. It is a course geared toward both the non-art student as a means to develop and bolster one's proficiency in science oriented endeavors, and also for the art student who would like to develop a strong technical foundation in the principals of torch worked glass. Welds, marias, bends, hot popping, scoring, pulling points, heats for punties and their application, heat color index, flame settings, flame guides, and principals and working methods of glass will be covered in this course. This course requires technical precision and proficiency, and will therefore be the main criteria for assessment, but thoroughness, commitment, effort, dedication, perseverance, timeliness, and experimentation will also be considerations for assessment.

ARTZ 291A COLD FABRICATION (4)

Glass making processes including cutting, grinding, laminating, etching, graals, and sandblasting will be covered in this course. Students will gain an understanding of both hot and cold processes. This course will free the student of the technical challenges that building hot presents, and, in turn, open the door to artwork based in completely different and liberating outcomes. The students will have four hours of hot shop time per week to produce items to affect in the cold shop. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content.

ARTZ 291B FUNDAMENTAL FUSING, CASTING, PATE` DE VERRE (4)

This course will explore various aspects of casting, including sand, kiln casting (this style of work incorporates traditional lost wax casting techniques, but casts with glass instead of metals) and hot casting, as well as pate` de verre (paste of glass) and fusing techniques. These working methods allow for greater control and detail, without the heat and heavy physical demands typical of other glass working methods. Students will be able to build models, make molds, and understand various casting methods, through which they will be able to channel their ideas and render significant commentary. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content.

ARTZ 291C – INTERMEDIATE GLASSBLOWING AND SCULPTING (4)

This course provides the student a deeper look into technical and conceptual refinement within contemporary glass working methods, both sculpturally and blown forms in the off-hand method. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content. The course will build on the students' knowledge base acquired in the 100 level course(s), and will add the use of a hand torch and garage to the students' repertoire in order to combine the precision and detail of the torch with the ability to construct more intricate and unique works with the introduction of the garage.

ARTZ 291D INTERMEDIATE FLAME WORKING (4)

This course will focus on using borosilicate for an artistic application. The students will learn how to use tubing to blow glass by pulling points. They will also work with glass rods and color to make solid work such as implosion marbles, sculpture and lattice built structures. Their ability to allow their ideas to form glass will provide a path towards unique conceptually and technically sound artworks. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content.

ARTZ 291E INTERMEDIATE SCIENTIFIC GLASS (4)

Building on the skills acquired in ARTZ 191c, this course will add in the use of fritted glass, ground joints, bridges, sealing maria welds, flat optical welds, butt seals, T-seals, flares (45 and 90), bends (90 and 180), ring seals (straight and side), ground joint welds and attachment techniques, bull nose reamers and no-blow welds. Students will gain proficiency and refine the fundamentals of torch-worked borosilicate. Scientific glass work requires technical precision and proficiency, and will therefore be the main criteria for assessment, but thoroughness, commitment, effort, dedication, perseverance, timeliness, and experimentation will also be considerations for assessment.

ARTZ 391A –ADVANCED GLASSBLOWING AND SCULPTING (4)

Students who wish to continue to develop their skills learned in the hot shop, with the torch, fusing and casting techniques, and in the cold shop will deepen their knowledge in this course. Students will hone technical developments with art theory in order to create a more polished and thought provoking outcome. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content. This course requires technical precision and proficiency, and will therefore be the main criteria for assessment, but thoroughness, commitment, effort, dedication, perseverance, timeliness, and experimentation will also be considerations for assessment.

ARTZ 391B – ENCASEMENTS (4)

This course will unify flame working, off-hand, and casting disciplines in order to combine the detail of the torch with the optical volume of furnace work. The students will work to create conceptual narratives by developing topic oriented objects on the torch, and manipulate the glass that encompasses the torch worked components contained therein, either in the off-hand or hot casting methods. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content. Prereq: ARTZ 241 and 252

ARTZ 391C – ADVANCED SCIENTIFIC GLASS (4)

This course will introduce students to lathe working techniques, the lathe anatomy and how to control it, which will enable students to work larger, more complex, and with more physical and technical ease. Use of stoppers, blow hoses, Bunsen burners, premix hand torches will be covered. Introduction to quartz, sodium silicate, fused silica, and other exotic glass types, as well as use of hydrogen as a fuel will be covered in this course work. This course requires technical precision and proficiency, and will therefore be the main criteria for assessment, but thoroughness, commitment, effort, dedication, perseverance, timeliness, and experimentation will also be considerations for assessment.

ARTZ 391D – ADVANCED COLD FABRICATION (4)

Students will continue to build on their cold fabrication foundation. This course will cover battuto and inciso surface ornamentation, as well as Rayzist. Students will learn about lamination techniques including flood coating. They will become familiar and knowledgeable with the use of UV glue, epoxies, and silicone. Students will be given four hours of hot shop time per week to produce work to affect in the cold shop. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content.

ARTZ 391E – NEON

Using the fundamentals of torchworking, students will learn how to make bends in tubing, sculpt hollow forms, vacuum and fill the forms with different gases for different effects and

colors, and turn their glassworks into lighting, décor, art, and statement pieces to their intention. Students will be assessed by the proficiency they evidence in their artwork, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content. Prereq: ARTZ 151 and 252

ARTZ 391F ADVANCED FUSING, CASTING & PATE DE VERRE (4)

This course is an opportunity to delve deeper into the optical world of casting. Students will work to incorporate the use of components created either on the torch or in the hot-shop into their castings to deepen the meaning of their work and separate their voice and artistic vision further from the pack. Students will also work to refine, rearrange and recombine fused work, as well as pate de verre techniques. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content.

ARTZ 391G ADVANCED GLASS CONCEPT-VISITING ARTIST SERIES (4)

This course is an opportunity for the student gain exposure to working techniques by a professional artist who will come to Western to teach a course in the Visiting Artist's particular topic or technique of interest. This class will offer the student diversified methods of working and conceptual approaches to art. Students will be assessed by the proficiency they evidence in their artworks, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content, as well as by the considerations of the visiting instructor.

ARTZ 494A ART SEMINAR: PROFESSIONAL PRACTICES-WORKSHOPS BEYOND WESTERN (4)

This provides an opportunity to utilize the summer semester to investigate the world beyond Western. There are many schools throughout the United States, and beyond our borders, that offer workshop, under the tutelage of a professional artist, in order to learn unique and specialized techniques, network, for students to connect to the larger glass and art community, gain new experiences and expose. A review of the school, the course and its duration, as well as a signature by the Program Chair, is required before this course is approved. Students will be assessed by the proficiency they evidence in their

artwork, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content. In order to do so, the student must provide images of the work produced, as well as evidence the research and development that contributed to the works produced.

ARTZ 494B ART SEMINAR: PROFESSIONAL PRACTICES-PUBLIC ART (4)

Students will apply for either a "call to artists" commission for a public work, or personally design art while working with a public or private enterprise in order to complete and install artwork into a public or private setting, build professional experience, resume, and learn the business of art. Students will be assessed by the proficiency they evidence in their artwork, thoughtful research that informs their work, and commitment to excellent craftsmanship, composition, form and content. In addition, The finalized work in its installed space and how it came to exist in that space will be assessed by the following criteria: how effectively and aesthetically considered was the work presented; does the work respond and relate well to the space around it; how well did the student work with the company, city, or agency; and was the student timely and accountable for all involved parties.

ARTZ 494C ART SEMINAR: PROFESSIONAL PRACTICES-EQUIPMENT BUILDING AND STUDIO MANAGEMENT (4)

Students will have the opportunity to help build studio equipment and observe, firsthand, how the equipment is installed properly and safely into a functional, working studio. Students will gain the ability to apply this information to their own studio building process, career as a shop manager or technician and equipment builder. The students will be assessed based upon their ability to show that they understand specific working methods, evidenced by the accuracy with which they execute those techniques in the making of the equipment for the class.

* 91 numbers represent new courses that need to be common course numbered if curriculum proposal is approved.

Annual Courses Offered in Glass

The following proposed course-loads (2-4) per block integrates into the faculty member's already existing course load.

- All blocks are capped at 20 total students, for all courses per each block.
- When enrollment increases in excess of 20 students per block, Western will then start to separate the classes by hiring another teacher to offset the students' demand for courses. By keeping with Western's current structure of consolidating 2-4 courses to a block, class size is used to determine the instructor demand, as needed, maintaining the cost per instructor efficiency.

Fall				Spring			
Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8
Off-Hand ARTZ 191a ARTZ 291c ARTZ 391a	ARTZ 391g (visiting artist series)	Torch ARTZ 191b ARTZ 291d ARTZ 391b ARTZ 391e	Scientific ARTZ191c ARTZ 291e ARTZ 391c	O-H or Torch 191a 191b 291c or 291d 391a 391b Rotate/year	ARTZ 391g (visiting artist series)	Cold ARTZ 291a ARTZ 391d	Casting/Fusing ARTZ 291b ARTZ 391f
+490b & +499 as stringer, *494 a, b, c TBD – as needed				+ 498 & +499 as stringer, *494 a, b, c TBD – as needed			

Degrees and Coursework Offered in Glass:

Certificate in Glass – Students will complete 24 credits in glass courses, and 8 credits of Arts History – a one year degree. (32 total credits)
Associate Degree in Glass – Students will complete 28 credits of glass courses, and 32 credits in general education credits – this is a two-year degree. (60 total credits)

Minor in Glass – Students must complete at least 20 credits in glass.

BA – Art: Students must enroll in 30 art credits, beyond the five prerequisite art courses. (120 total credits)

