Group II Mathematics:
Mathematical literacy implies an appreciation of the beauty of mathematics, an ability to apply mathematical reasoning, and an understanding of how mathematics and statistics are used in many arenas. Mathematical literacy may be obtained through the study of topics such as the properties of numbers, mathematical modeling, geometry, data analysis and probability, with the overarching goal of learning mathematical reasoning and problem solving.

Mathematical literacy cannot be achieved in a single course. However, for the purposes of general education, the mathematical literacy requirement can be met by any one of the following:

1. achieving a grade of C- or better in one of the following courses which address different aspects of mathematical literacy: Math 104, 105, 115, 118, 121, 122, M132, 135, 151, 162, or a mathematics course of 3 or more credits for which one of these is a prerequisite.
2. achieving a score of 50 or better on the CLEP College Algebra Test, the CLEP College Precalculus Test, or the CLEP College Mathematics Test.
3. passing the Mathematical Literacy Examination administered by the Department of Mathematical Sciences. To qualify to take the Mathematical Literacy Examination, a student must have achieved a score of 630 or better on the SAT Math exam or a score of 28 or better on the ACT Math exam. A student may only take the Mathematical Literacy Examination only once. Further details are available from the Department of Mathematical Sciences.

Students must complete the mathematical literacy requirement by the time they have earned 30 credits; if not, they must register for a mathematical sciences course every semester until they have completed the requirement. Because many other courses at the university assume some mathematical literacy, it is strongly recommended that all students complete their mathematical literacy requirement as soon as possible.

<table>
<thead>
<tr>
<th>Criteria:</th>
<th>Learning Goals:</th>
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</thead>
<tbody>
<tr>
<td>Any course which satisfies the mathematical literacy requirement must have as its primary goal to teach mathematical reasoning and problem solving at a college level. Department of Mathematical Sciences approval is required.</td>
<td>Upon completion of the mathematical literacy requirement, a student will be able to apply effectively mathematical or statistical reasoning to a variety of applied or theoretical problems.</td>
</tr>
</tbody>
</table>
**Group III Modern and Classical Languages**

*Students are encouraged to complete their modern and classical language or symbolic systems courses early, so that they can apply those skills to upper-division coursework.*

Courses must encompass the comprehensive study of a natural language other than written or spoken contemporary English.

<table>
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<tbody>
<tr>
<td>Courses must encompass the comprehensive study of a natural language,</td>
<td>Upon completion of the Modern and Classical Languages sequence, the student</td>
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<tr>
<td>excluding written, spoken contemporary English, with the aim of achieving</td>
<td>will have a basic functional knowledge of a second natural language</td>
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<td>at least a basic functional competency in that language. The course</td>
<td>sufficient to:</td>
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<tr>
<td>should follow a rigorous and pedagogically sound methodology and practice.</td>
<td>1. read and write if the language is classical, such as Latin;</td>
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<tr>
<td>Language courses proposed outside of current MCLL offerings must be</td>
<td>2. speak and aurally comprehend, if the language does not have a written</td>
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<td>approved by the MCLL Department.</td>
<td>tradition, such as Salish;</td>
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<td></td>
<td>3. perform all four skills (speaking, aural comprehension, reading, and writing)</td>
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<td>if the language is modern and has a written tradition, such as Japanese or</td>
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<td></td>
<td>French.</td>
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<td>4. demonstrate both receptive (visual comprehension) and expressive (manual</td>
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<td>production) proficiency if the language is American Sign Language.</td>
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</tbody>
</table>

**Group III Exemption**

Extended majors have been granted exceptions to the Modern and Classical Language requirement. Students graduating in any one of these majors are not required to complete the Modern and Classical Language requirement. Students graduating with an Associate of Arts degree have also been granted an exception to the Group III requirements. Missoula College students who continue to Mountain Campus without graduating will need to complete Group III unless their declared four-year major has been granted an exception. (See catalog for listing)

**Group IV Expressive Arts:**

Expressive Arts courses are activity-based and emphasize the value of *learning by doing* in an artistic context.

<table>
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<tr>
<th>Criteria:</th>
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<tbody>
<tr>
<td>Courses guide students, whether in individual or group settings, to</td>
<td>Upon completion of this group students will be able to:</td>
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<td>acquire foundational skills to engage in the creative process and/or in</td>
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<tr>
<td>interpretive</td>
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</tbody>
</table>
Group V Literary and Artistic Studies:
In these courses, students develop familiarity with significant works of artistic representation, including literature, music, visual art, and/or performing arts. Through this experience, students enhance their analytical skills and explore the historical, aesthetic, philosophical, and cultural features of these works.

<table>
<thead>
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<th>Criteria:</th>
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<tbody>
<tr>
<td>Courses cover a number of works in one or more of the various forms of artistic representation; they also establish a framework and context for analysis of the structure and significance of these works. In addition, these courses provide mechanisms for students: 1) to receive instruction on the methods of analysis and criticism; 2) to develop arguments about the works from differing critical perspectives.</td>
<td>Upon completion of this group, students will be able to:</td>
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<tr>
<td>1. analyze works of art with respect to structure and significance within literary and artistic traditions, including emergent movements and forms; and</td>
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<tr>
<td>2. develop coherent arguments that critique these works from a variety of approaches, such as historical, aesthetic, cultural, psychological, political, and philosophical.</td>
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Group VI: Historical Studies:
The primary purpose of courses in this perspective is to explore the historical contexts and narratives of human behavior, ideas, institutions, and societies through an analysis of their patterns of development or differentiation in the past. These courses are wide-ranging in chronological, geographical, or topical focus. They introduce students to methods of inquiry that enable them to understand and evaluate the causes and significance of events, texts, or artifacts.

Learning Goals:
Upon completion of a course in this group, a student will be able to:

- Critically analyze and evaluate primary sources – such as texts, pictorial evidence, oral histories, music, and/or artifacts- within their respective historical contexts.
- Synthesize ideas and/or information in order to understand the problems, causes, and consequences of historical developments and events.

Group VII Social Science:
Social science courses describe and analyze human social organization and interaction, employing social
data at a broad scale with statistical relevance, experimental data on individuals or groups, or qualitative data based on observation and discourse.

<table>
<thead>
<tr>
<th>Criteria:</th>
<th>Learning goals:</th>
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<tbody>
<tr>
<td>Courses:</td>
<td>Students taking courses in the Social Sciences Group will be able to:</td>
</tr>
</tbody>
</table>
| 1. systematically study individuals, groups, or social institutions;  
2. analyze individuals, groups, or social problems and structures; and/or  
3. give considerable attention to ways in which conclusions and generalizations are developed and justified as well as the methods of data collection and analysis. | 1. Describe the nature, structure, and historical development of human behavior, organizations, social phenomena, and/or relationships;  
2. use theory in explaining these individual, group, or social phenomena; and/or  
3. understand, assess, and evaluate how conclusions and generalizations are justified based on data. |

**Group VIII Ethics and Human Values:**
Ethics and Human Values courses familiarize students with one or more traditions of ethical thought. These courses rigorously present the basic concepts and forms of reasoning that define and distinguish each tradition. The focus of these courses may be on one or more of these traditions, or on a concept such as justice or the good life as conceptualized within one or more of these traditions, or on a professional practice within a particular tradition.

<table>
<thead>
<tr>
<th>Criteria:</th>
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</table>
| 1. Courses focus on one or more of the specific traditions of ethical thought (either Western or non-Western), on basic ethical topics such as justice or the good life as seen through the lens of one or more traditions of ethical thought, or on a professional practice within a particular tradition of ethical thought.  
2. Courses provide a rigorous analysis of the basic concepts and forms of reasoning which define the traditions, the ethical topics, or the professional practices that are being studied. | Upon completion of an Ethics and Human Values course, students will be able to:  
1. correctly apply the basic concepts and forms of reasoning from the tradition or professional practice they studied to ethical issues that arise within those traditions or practices;  
2. analyze and critically evaluate the basic concepts and forms of reasoning from the tradition or professional practice they studied. |

**Group IX: Democracy and Citizenship**
These courses ground students in the ideas, institutions, and practices of democratic societies and their historical antecedents. Knowledge gained through courses in the Y perspective prepares students to understand the rights and responsibilities of engaged citizenship and to assess the characteristics, contributions, and contradictions of democratic systems.
Learning Goals
Upon completion of a Democracy and Citizenship course, students will be able to:

- Demonstrate informed and reasoned understanding of democratic ideas, institutions and practices, from historical and/or contemporary perspectives;
- Analyze and evaluate the significance and complexities of engaged citizenship; and
- Articulate the causes and consequences of key historical and/or contemporary struggles within democratic systems or their antecedents, including but not limited to those pertaining to issues of diversity, equity, and justice.

Group X: Cultural & International Diversity
These courses foster an appreciation for diverse cultures, their histories, and their positions in world spheres of power and change. This includes knowledge of diverse cultures in comparative and thematic frameworks. Knowledge gained through courses in the X perspective prepares students to cultivate ways of thinking that foster an understanding of the complexities of indigenous or international cultures and global issues, both past and present.

Learning Goals
Upon completion of a course in this group, students will be able to:

- Demonstrate an understanding of the diverse ways humans structure their social, political, and cultural lives;
- Interpret human activities, ideas, and institutions with reference to diverse cultural, historical and geo-political perspectives and physical environments; and
- Recognize the complexities of inter-cultural and international communications and collaborative endeavors, and relate this to the complex challenges of the 21st century.

Group XI Natural Science:
These courses present scientific conclusions about the structure and function of the natural world, demonstrate or exemplify scientific questioning and validation of findings.

<table>
<thead>
<tr>
<th>Criteria:</th>
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<tbody>
<tr>
<td>1. Courses explore a discipline in the natural sciences and demonstrate how the scientific method is used within the discipline to draw scientific conclusions:</td>
<td>Upon completion of this group, a student will be able to:</td>
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<td></td>
<td>1. understand the general principles associated with the discipline(s) studied;</td>
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<td>2. understand the methodology and activities scientists use to gather, validate and interpret data related to natural processes;</td>
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<td>3. detect patterns, draw conclusions, develop conjectures and hypotheses, and test them by appropriate means and experiments;</td>
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<td>4. understand how scientific laws and theories are</td>
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<td>2. Courses address the concept of analytic uncertainty and the rigorous process required to take an idea to a hypothesis and then to a validated scientific theory;</td>
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<td>3. Lab courses engage students in inquiry-based learning activities where they formulate a</td>
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<td>hypothesis, design an experiment to test the hypothesis, and collect, interpret, and present the data to support their conclusions.</td>
<td>verified by quantitative measurement, scientific observation, and logical/critical reasoning; and 5. understand the means by which analytic uncertainty is quantified and expressed in the natural sciences.</td>
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</table>