I. Course Information/Signature Page

Date: 2/5/2020
Course Title: MAT 127 Mathematical Literacy II
Proposed Course Title (*only for courses proposing new titles through Curriculum Committee*):
 Click here to enter proposed course title.
Department/Subject Designator: Mathematics
Number credits: 3
Pre-requisites/Co-requisites: MAT 091 or equivalent
Sponsor Proposer: Tairi Mead
Sponsor Department(s): Mathematics
Cross-listed proposer (if applicable): Click here to enter cross-listed proposer.
Cross-listed department (if applicable): Click here to enter cross-listed department.
Effective semester/year of Proposed GE Addition: Already a gen ed course, just updating SLO map

Approvals		*Yes*	*No*
Sponsoring Department: (Chair signs for Department)	Date		
Comments:			
Department Chair:	Date		
Comments:			
Sponsoring Division: (Dean signs for Division)	Date		
Comments:			
Cross-listed Department (if applicable): (Chair signs for Department)	Date		
Comments:			
Cross-listed Division (if applicable): (Dean signs for Division)	Date		
Comments:			
These signatures will be obtained upon approval of the revisions to the General Education course			
General Education Committee: (Chair signs for Committee)	Date		
Comments:			
Registrar:	Date		
Comments:			
EVP/CAO:	Date		
Comments:			

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SUNY Broome General Education Course Assessment Map & Plan
SUNY Broome GE Course SLO Alignment with SUNY-GER Course Alignment/SUNY Broome ILOs

Course Title and Number: Please list the course number and title here*: MAT 127 Mathematical Literacy II*

Course Modalities: Please list the modalities which the course is offered (in class, online, blended, Fast Forward). Please note, you are expected to assess across <u>all</u> modalities in which your course was offered at the time of assessment during your assessment schedule. *in class, online*

SUNY-GER Category: Please list the SUNY–GER category here by <u>number</u> (see below): *Mathematics*

SUNY GER Learning Outcomes: Please list the outcomes from the knowledge area to be covered here (please review Guidelines for the approval of State University Gen Ed Requirement Courses). Each outcome within the knowledge area proposed must be included and mapped to SUNY-GER SLOs & BCC ILOs.

Students will demonstrate:
1. interpret and draw inferences from mathematical models such as formulas, graphs, tables and schematics;
2. represent mathematical information symbolically, visually, numerically and verbally;
3. employ quantitative methods such as, arithmetic, algebra, geometry, or statistics to solve problems;
4. estimate and check mathematical results for reasonableness; and
5. recognize the limitations of mathematical and statistical methods.

Assessment Schedule: Please list the assessment schedule here, including semester and year it will occur; if assessment is done each semester, please indicate this. *Spring 2022, Spring 2025, Spring 2028*

Alignment of Local (select), SUNY-GER, & SUNY BCC ILOs: *(you may add more rows to the table as needed)****
Please find the new SUNY BCC ILO which corresponds to your course SLO. For courses previously approved, please use the crosswalk table below.

Course SLO *(every course SLO should be listed, as stated within the college catalogue & course syllabus)*	SUNY-GER SLO *(indicate which GER SLO is met; if none, write N/A)*	SUNY BCC ILO *(indicate which SUNY BCC ILO is met; every course SLO should be mapped to a BCC ILO)*	Assessment Timeline *(indicate the frequency in which assessment occurs, including semester and year within assessment cycle)*	Learning Activity *(indicate the learning activity used to assess the SLO/ILO; both indirect & direct assessments should be used)*	Criteria for Success/Benchmark *(indicate the criteria used to assess SLO/ILOs & the benchmark for success)*
1. Apply the various methods of organization and interpretation of data.	1. interpret and draw inferences from mathematical models such as formulas, graphs, tables and schematics; represent mathematical information symbolically, visually, numerically and verbally; 3. Employ quantitative methods such as arithmetic, algebra, geometry, or statistics to solve problems. 5. recognize the limitations of mathematical and statistical methods	**(ILO 2)** Critical analysis and decision-making **(ILO 4)** Scientific and quantitative reasoning **(ILO 5)** Technological competency	Spring 2022, 2025, 2028	Relevant questions used on activities, quizzes or exams Assessments will require student use of technology A scoring rubric will be used	Benchmark: 60% of the students in the categories of **completely correct or generally correct** as defined by the scoring rubric for the assessment
2. Solve applications involving ratios and percentages	1. Interpret and draw inferences from mathematical models such as formulas, graphs, tables and schematics. 2. Represent mathematical information	**(ILO 2)** Critical analysis and decision-making	Spring 2022, 2025, 2028	Relevant questions used on activities, quizzes or exams A scoring rubric will be used	Benchmark: 60% of the students in the categories of **completely correct or generally correct** as defined by the scoring rubric for the assessment

	symbolically, visually, numerically and verbally. 3. Employ quantitative methods such as arithmetic, algebra, geometry, or statistics to solve problems. estimate and check mathematical results for reasonableness	**(ILO 4)** Scientific and quantitative reasoning			
3. Develop and use linear, piecewise and exponential models to solve real-life applications	1. Interpret and draw inferences from mathematical models such as formulas, graphs, tables and schematics. 2. Represent mathematical information symbolically, visually, numerically and verbally. 3. Employ quantitative methods such as arithmetic,	**(ILO 2)** Critical analysis and decision-making **(ILO 4)** Scientific and quantitative reasoning	Spring 2022, 2025, 2028	Relevant questions used on activities, quizzes or exams A scoring rubric will be used	Benchmark: 60% of the students in the categories of **completely correct or generally correct** as defined by the scoring rubric for the assessment

	algebra, geometry, or statistics to solve problems. 4. Estimate and check mathematical results for reasonableness 5. Recognize the limitations of mathematical and statistical methods.				
4. Use estimation and unit conversion to develop number sense	1. Interpret and draw inferences from mathematical models such as formulas, graphs, tables and schematics. 2. Represent mathematical information symbolically, visually, numerically and verbally. 3. Employ quantitative methods such as	**(ILO 2)** Critical analysis and decision-making **(ILO 4)** Scientific and quantitative reasoning	Spring 2022, 2025, 2028	Relevant questions used on activities, quizzes or exams A scoring rubric will be used	Benchmark: 60% of the students in the categories of **completely correct or generally correct** as defined by the scoring rubric for the assessment

	arithmetic, algebra, geometry, or statistics to solve problems. Estimate and check mathematical results for reasonableness				
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SUNY GER SLO (SUNY General Education Student Learning Outcomes)
Knowledge and Skill Areas:
1. Mathematics
2. Natural Sciences
3. Social Sciences
4. American History
5. Western Civilization
6. Other World Civilizations
7. Humanities
8. The Arts
9. Foreign Language

GEC 3/19

10. Basic Communication
Competencies:
1. Critical Thinking
2. Information Management

NEW SUNY Broome ILOs (Institutional Learning Outcomes)
1. Cultural and global awareness
2. Critical analysis and decision making
3. Oral and written communication
4. Scientific and quantitative reasoning
5. Technological competency
6. Information Literacy

OLD SUNY Broome ILOs (Institutional Learning Outcomes)
1. **(ILO 1)** Apply relevant knowledge, technology, and tools from the academic disciplines in the contexts of personal, professional, and civic interactions, with sensitivity to diverse peoples and cultures.
2. **(ILO 2)** Read, write, speak, and listen effectively in both personal and professional spheres.
3. **(ILO 3)** Retrieve, organize, analyze, evaluate, and appropriately use information.
4. **(ILO 4)** Perform effectively as a team member.
5. **(ILO 5)** Reflect on, reason about, and form independent judgments on a variety of ideas and information, and use these skills to guide their beliefs and actions.
6. **(ILO 6)** Exercise individual and social responsibilities through personal development and self-advocacy, healthy life-style choices, ethical behavior, civic involvement, interaction with diverse cultures, commitment to life-long learning, and engagement with global issues.
7. **(ILO 7)** Integrate knowledge and skills gained and adapt them to new settings, questions, and responsibilities.

GER Requirements Crosswalk SUNY Broome Community College			
MSCHE GER Curriculum Components	**SUNY GER Curriculum Areas & Components**	**New BCC ISLOs**	**Old BCC ISLOs**
Cultural and global awareness and cultural sensitivity	Western Civilization, Other World Civilizations, Foreign Language, Humanities, Arts	**(ILO 1)** Cultural and global awareness	ISLO 1, ISLO 4, ISLO 6

Values, ethics, and diverse perspectives	Social Science, American History, Other World Civilizations, Foreign Languages, Humanities, Arts	**(ILO 1)** Cultural and global awareness	ISLO 1, ISLO 5 ISLO 6
Critical Analysis and Reasoning	Critical Thinking	**(ILO 2)** Critical analysis and decision-making	ISLO 5, ISLO 7
Oral and written communication	Basic Communication (Written and Oral)	**(ILO 3)** Oral and written communication	ISLO 2
Scientific and Quantitative Reasoning	Natural Science, Social Science, Mathematics	**(ILO 4)** Scientific and quantitative reasoning	ISLO 3
Technological Competency	Basic Communication, Information Management	**(ILO 5)** Technological competency	ISLO 1
Information Literacy	Information Management	**(ILO 6)** Information literacy	ISLO 3

10/18/17, 6/18