The Gow School Summer Program
Summer 2023 Course Descriptions

Reconstructive Language

Objectives

Students will learn to:

- Use Reconstructive Language cards, review lists, and study sheets in various phases of the course
- Maintain a complete set of Reconstructive Language cards, memorize and recite the sounds, and provide examples of the connection between phonetic sounds and the pronunciation of words
- Learn the meanings of vocabulary words and to demonstrate accurate usage of these words in both oral and written expression
- Use spell-a-bles (when appropriate), elementary spelling rules, mnemonic devices, and medicine sentences

Methods

The purpose of Reconstructive Language is to improve language skills, primarily with the written word. A systematic audio/visual/kinesthetic, phonetic approach is directly taught. The core areas of the course in addition to phonics are vocabulary, spelling, and oral reading. The course is highly structured with emphasis placed on memorization, drill work, mnemonics, and regular practice in application. The students express themselves through class discussions and writing assignments. Students break the alphabet down into categories of one-sound consonants and vowels and special consonants. They are taught how to create a Reconstructive Language deck of cards for phonics and vocabulary. Students are also taught how to use the cards in class or on their own either individually or with another student, how to set up a Reconstructive Language notebook, how to create and use review lists, and how to use the study sheets used by the teacher. The students learn the sounds through regular recitations and other drills such as picking out sounds in both familiar and unfamiliar words. They learn how these sounds relate to pronunciation with practice in sounding out words and through oral reading. The students discuss assigned words to help in comprehension of their meanings. By using their vocabulary deck and review list individually and in class, they memorize the meanings of these words. They demonstrate use of these words through oral drills, quizzes in class, and written assignments. The idea of spellables is presented with examples and applied in spelling lessons. Elementary spelling rules are presented as applicable in spelling lessons and reinforced through drills and quizzes. Mnemonic devices and medicine sentences are presented when they apply and are reinforced throughout the year. Oral reading occurs regularly with particular attention paid to attack of unfamiliar words using phonics, accuracy of function words, proper inflection, punctuation and overall comprehension. Students try various techniques for memorization and effective studying as needed. A notebook is developed. Effective organizational skills are stressed. Tests and exercises are reviewed and discussed with students.

Assessment

Students will:

- Write coherently on brief, teacher assigned topics, correctly applying the vocabulary studied in the course, along with proper punctuation and grammar
- Correctly use vocabulary words studied in the course during teacher led discussions
- Correctly decode and pronounce phonetic sounds connected with the Reconstructive Language cards both in isolated drill sessions, and in the context of oral reading
- Define vocabulary words given a selection of such words used in instruction
- Write out spelling words accurately, applying spellables, spelling rules, and medicine sentences, given a selection of spelling words used in instruction

Organization and Study Skills I and II

Objectives

Students will learn to:

- Extract information and meaning from text using marginal notation and summation techniques
- Gather and interpret information presented in a variety of ways, including charts, tables, graphs and pictures
- Take and organize notes in a variety of methods such as Cornell notes and concept mapping
- Find information in libraries
- Organize information gathered through research or observation
- Organize, plan, and methodically follow through on a project
- Plan, organize, and produce various projects using information found through research
- Study for and take different sorts of tests in a variety of active methods
- Construct physical models of objects based on research

Methods

Study Skills classes focus on building academic skills needed to organize, store, present, and recall information accurately in order to use it in a variety of ways. Topics are covered according to student need. These skills are taught in the context of an inquiry into several major themes developed by the teacher such as histories of businesses, historic or contemporary issues, issues in the environment, the problem of poverty, or other themes based on student interest in a given topic. The number of themes covered during the program will be three or less.

Assessment

Student assessment is based on participation in class activities, and on their research and completion of projects based on assigned themes.

ESL Summer Workshop

Objectives

Students will learn to:

- Use English in social conversations
- Use English for academic purposes
- Learn and use English vocabulary
- Work individually, in pairs and as a full class to improve their English proficiency
- Apply strategies learned in class to help them gather information, summarize, predict, analyze, persuade, inform or infer (the strategies taught will be dependent on the students' age and current English language proficiency.)

Methods

Students will be instructed in English using a multisensory teaching model which may include picture books, video, leveled readers, and Language learning software programs such as Rosetta Stone or other appropriate language software. Students will use English for a variety of purposes including social and academic verbal communication and academic writing. Student instruction will be designed by the teacher based on the students and classes' proficiency with English based on the instructors' assessment.

Assessment

Students will be assessed on their participation in class during individual and group activities. Students will also be assessed on their ability to learn and apply strategies and concepts covered during the class to their spoken and written English.

Writing Process Level I

Objectives

Students will learn to:

- Keep a daily journal
- Work towards mastery of the basic parts of speech such as nouns, action words, adjectives, and adverbs
- Brainstorm using a variety of techniques such as webbing, outlining, and free association
- Draft pieces in a variety of forms which may include Basic Sentence Pattern practice sentences, topic sentences, and various types of paragraphs
- Revise selected pieces to improve content, organization, style, usage, and mechanics
- Edit selected drafts to the final draft stage to produce polished final drafts
- Conference constructively with teachers and peers throughout the writing process

Methods

Writing I (Grammar) teaches and reinforces the basics of writing using the Constructive Writing curriculum taught during the Winter Program of The Gow School. Grammar, including parts of speech and sentence structure using the six Basic Sentence Patterns, is the focus. Free writing, journal writing, brief personal narratives, and work with the Basic Paragraph, as well as peer reviews, may be incorporated to focus and enhance the concepts taught. Students are responsible for daily written work, which will be compiled into a portfolio upon completion of the Summer Program.

Assessment

Students will be assessed on their participation in daily writing activities and their participation in class. Students will also be assessed on their final drafts of writing assignments which will be included in a portfolio, and the portfolio will be reviewed at the end of the summer.

Writing Process Level II

Objectives

Students will learn to:

- Develop a topic or theme
- Employ the basics of sentence and paragraph, and essay structure
- Analyze and critically review peer writing as well as their own work
- Revise and edit written work for the "final draft" stage of the writing process

Methods

Writing II teaches and reinforces paragraph and essay structure using the Constructive Writing curriculum taught during the Winter Program of The Gow School. The students will focus on grammar, the six Basic Sentence Patterns, peer review, and Basic and Expanded Paragraphs while writing informative, analytical, and expository pieces. Students are responsible for daily written work as well as a completed portfolio of written work at the conclusion of the Summer Program.

Assessment

Students will be assessed based upon daily participation in discussions and activities. Daily written work and the portfolio will also be assessed based on the teacher's guidelines.

Writing Process Level III

Objectives

Students will learn to:

- Research story ideas through appropriate means which may include gathering information through observations, direct personal interviews, or the use of primary sources
- Express themselves creatively through writing
- Analyze and critique creative pieces of writing, such as short stories, poetry, and narratives to enhance their understanding of structures
- Revise selected drafts to improve content, organization, style, usage, and mechanics
- Conference constructively with teachers and peers throughout the writing process select appropriate photographs to support newspaper articles

Methods

Students in Writing Process Level III will engage in the writing process using elements of the Gow School's Constructive Writing Program which may include the six Basic Sentence Patterns and writing strategies appropriate to the style and content of the writing assignments. Students in the class will compose a variety of written pieces for inclusion in *The Gow Summer Sun.* Peer review is also used as a means to assist with the revision process.

Assessment

Students in Writing Process Level III will be assessed on their level of classroom participation, their ability to learn and implement the elements of the Constructive Writing Program, and their ability to brainstorm, plan, draft, revise, and publish various writing pieces. Students will also be assessed on their ability to meet authentic writing deadlines.

Summer Reading Workshop

Objectives

Students will learn to:

- Read silently and orally for comprehension
- Employ various note taking strategies during reading
- Keep a journal as they progress through their reading
- Make written observations, summarize, question, and quote the text as they are reading
- Reflect on their observations, etc. in a personal response format relating the reading to their own lives
- Discuss their reading to show comprehension

Methods

Summer Reading Workshop is designed to assist each student to read for comprehension and to increase reading speed and fluency. Students are to focus on summer reading for pleasure and/or to meet school requirements. The course requires students to keep a journal and discuss selections with their peers and the teacher. Projects, book reports and journals requested by the student's winter school will be incorporated into the class on an individualized basis.

Assessment

Students will be assessed through their daily progress with reading material, sharing of readings, and journal entries.

Please note: Students bringing required books or other materials to camp from home should store those items with the teacher.

Computer I - Assistive Technology

Objectives

Students will learn to:

- Type proficiently using *Mavis Beacon*
- Learn how to utilize *Kurzweil 3000* (text-to-speech assistive technology)
- Learn how to utilize *Dragon Speak* (speech-to-text assistive technology)
- Use *Microsoft Word* to create and edit documents
- Create spreadsheets and manipulate data using *Excel*
- Create and use databases via *FileMaker Pro* or similar
- Explore other programs, e.g., *Paint, Inspiration, PowerPoint*, and other programs used in an education or research setting
- Learn file management techniques
- Learn how to develop and deliver an oral presentation using PowerPoint
- Use new techniques required for efficient internet search

Methods

This course is designed to instruct students how to effectively use various computer applications and assistive technology tools. This course is offered as an elective to students who wish to improve their computer literacy. Students may also be required take this class to complete requirements for their respective schools.

Assessment

Students are assessed daily on their behavior and participation in class activities. In addition, students are assessed on their progress and completion of class work.

Videography

Objectives

Students will learn to:

- Handle and maintain video equipment
- Shoot footage that displays creative composition, proper lighting, and clear audio
- Constructively critique their work and the work of their peers
- Edit footage, sound, and still photos using Final Cut Pro
- Conceptualize, storyboard, and execute various video projects
- Edit using special effect techniques
- Work effectively in a group as a director, videographer, actor, and/or editor
- Write open ended interview questions and interview students and teachers in a clear and organized fashion

Product

Videography projects may include productions about the themes of the week; interviews of GSSP teachers, staff, or students; and/or original movie or book reviews. Productions may include other academically appropriate projects.

Methods

Students taking Videography will learn how to properly use a camcorder to record nightly events on campus. They will then take these recordings and create a weekly video clip that may be posted on YouTube.com. In addition, the students will also storyboard, shoot and edit a various types of projects that they will take with them at the end of the program. Lastly, the classes will record the summer drama performances and save them to DVD format.

Assessment

Student assessment is based on participation in class, group work, and their ability to apply concepts taught in class to their individual projects. Videography classes are expected to produce at least one video a week per class after week one.

Photography

Objectives

Students will learn to:

- Handle and maintain digital cameras and associated equipment
- Take pictures that displays creative composition, proper lighting, etc.
- Constructively critique their work and the work of their peers
- Accept constructive criticism from the instructor
- Edit photographs using Adobe Photoshop
- Edit using special effect techniques

Methods

Photography will teach students how to properly use and maintain a digital camera. Students in Photography will learn about subject matter and composition. Students will also experiment with Aperture, Shutter Speed, and a variety of lenses and artistic/photographic techniques. Students will learn to process their images using Adobe Photoshop. The students will be given weekly critiques to help improve their work.

Assessment

Student assessment is based on participation in class, group work, and their ability to apply concepts taught in class to their individual projects. Photography classes are expected to produce several pieces a week in an effort to build a diverse portfolio by the end of the program.

Introduction to Coding & Computing

Objectives

Students will learn how to:

- Think algorithmically and solve problems.
- Code in at least one language which may include: Scratch, Blockly, Python 3, Sonic Pi, Java, or other languages.
- Use a Linux operating system.
- Set-up a Raspberry Pi computer.
- Build and control basic circuits with an LED and other components.

Methods

Students will learn and discuss coding in various languages, work collaboratively on programing exercises designed to reinforce new computing and coding concepts, and work individually on coding and programing assignments. Students will also learn to build basic circuits and to set-up Raspberry Pi computers.

Assessment

Students are assessed on daily class participation in discussions and activities. Students' projects (both hardware and software based) will be assessed based on problem solving ability, coding knowledge, effective project designs, and creativity.

Experimental Science

Objectives

Students will learn to:

- Formulate reasonable hypotheses
- Create experiments to test hypotheses
- Collect data and make observations
- Analyze data and observations
- Draw conclusions and compare to original hypotheses
- Relate conclusions to previously understood concepts
- Document, defend and report findings to others orally, in writing, and in multi-media presentations.

Methods

This course is intended as an introduction to the scientific method of inquiry. The course will focus on the development of the methods by which students formulate and test hypotheses, and of ways in which observations are analyzed and reported.

Assessment

Students will design and execute several experiments in the course of a summer. The teacher should be able to play a decreasing role in the formulation of questions and experiments, although it is not expected that students should be able to act as wholly independent researchers.

Robotics

Objectives

The students will learn to:

- Explain how a class team should be organized to ensure that the team members learn a significant subset of the project, a competitive robotic system is constructed, and all members stay busy during the class time.
- Describe the details of the task for their robot and explain the requirements for a successful demonstration of the robot.
- Demonstrate where to plug in components, such as motors, servos, and sensors and be capable of soldering where needed.
- When appropriate, use SolidWorks to design components of the robot. Then, if necessary, use machines such as the 3D printer or CNC machine to manufacture the parts. Simple part designs may be made using traditional drawings and simpler techniques.
- Use the engineering cycle to develop a robot which completes the required tasks.

Methods

In this course, students will be asked to develop a robot using a Bot-Ball, Vex or similar kit base to complete the required task. The robot will be required to perform a specific task, such as navigating a maze, engaging in robot combat, or finding a certain color object in a room to pick up and place in a container. Students in the class will be asked to work as a team to identify the objectives of their robot and then use a team-based approach to achieve their objectives. Students will be required to not only create the robot, but, if needed, design and manufacture unique components for it as well. This can involve simple methods, such as making a new wheel size using molds, to complex tasks, such as designing and cutting armor on SolidWorks and the CNC machine. It is a fun and engaging way to apply the mathematics, science, organizational, and teamwork elements woven throughout the camp.

Assessment

Students will be assessed by their effort, participation, and quality of their work. Students will also be asked to demonstrate proficiency with the hardware as well as, when used, design software. Ultimately, success will be determined by how well the students work together to accomplish their goals and objectives.

Math I

Objectives

Students will learn to:

- Add, subtract, multiply, and divide whole numbers
- Perform operations on fractions and decimals
- Solve percent problems
- Construct and interpret graphs of data
- Explore and solve non-routine problems
- Make persuasive arguments based on quantitative or mathematical evidence

Methods

This course is designed to reinforce and remediate basic math skills usually encountered in grades three through five with which students have difficulty. Students are encouraged to explore and communicate ideas quantitatively and use manipulative devices (i.e., base ten blocks, fraction tiles, etc.) in order to achieve understanding. Students may be required to build physical models or detailed drawings of solutions to problems.

Assessment

Students are assessed on daily class participation in discussions and activities. Pretests will be administered by the instructor to assess mathematical skills, and posttests will be used to identify growth and mastery of the concepts. If necessary, the instructor will provide recommendations on continued areas of study once the course is complete.

Math II

Objectives

Students will learn to:

- Add, subtract, multiply, and divide whole numbers and decimals
- Perform operations on fractions with and without common denominators
- Convert fractions, decimals, and percents
- Evaluate expressions using the appropriate order of operations
- Graph on the coordinate plane
- Construct and interpret graphs and charts of data
- Fit a line to observed data in an intuitive way, and draw conclusions based on that line
- Solve word problems involving multiple steps
- Explore and solve non-routine problems
- Make persuasive arguments based on quantitative or mathematical evidence

Methods

This course is designed to reinforce and remediate basic math skills usually encountered in grades six through seven with which students have difficulty. Students are encouraged to explore and communicate ideas quantitatively and use manipulative devices (i.e., base ten blocks, fraction tiles, etc.) in order to achieve understanding. Students may be required to build physical models or detailed drawings of solutions to problems. Students may use the TI-73 Explorer and computer software as a tool in solving problems.

Assessment

Students are assessed on daily class participation in discussions and activities. Pretests will be administered by the instructor to assess mathematical skills, and posttests will be used to identify growth and mastery of the concepts. If necessary, the instructor will provide recommendations on continued areas of study once the course is complete.

Math III

Objectives

Students will learn to:

- Perform operations on signed numbers, monomials, and polynomials
- Graph a linear equation using a table of values and using the slope and *y*-intercept
- Solve a system of linear equations by graphing
- Evaluate expressions using the appropriate order of operations
- Draw a line of best fit to observed data and draw conclusions based on that line
- Solve single and multiple step linear equations
- Identify and classify geometric shapes and solids
- Solve problems based on area and volume
- Explore and solve non-routine problems
- Make persuasive arguments based on quantitative or mathematical evidence

Methods

This course is designed to reinforce and remediate Pre-Algebraic and Algebraic skills usually encountered in grades eight through nine with which students have difficulty. Students are encouraged to explore and communicate ideas quantitatively. Students will use the TI-84 Plus or TI-*n*spire calculators as well as other computer software as a tool in solving problems. Students may be required to build physical models or detailed drawings of solutions to problems.

Assessment

Students are assessed based on daily class participation in discussions and activities. Pretests will be administered by the instructor to assess mathematical skills, and posttests will be used to identify growth and mastery of the concepts. If necessary, the instructor will provide recommendations on continued areas of study once the course is complete.

Math IV

Objectives

Students will learn to:

- Add, subtract, multiply, divide, and factor polynomials using algebra tiles as well as by traditional algorithmic methods
- Fit a curve to observed data in an intuitive way, and by using technology, draw conclusions based on that curve
- Solve systems of equations by the methods of graphing, substitution, and addition
- Solve radical, rational, and quadratic equations
- Graph lines, parabolas, circles, and other conic sections given their equations
- Add, subtract, multiply, and divide rational expressions
- Explore and solve non-routine problems
- Make persuasive arguments based on quantitative or mathematical evidence

Methods

This course is designed to reinforce and remediate Algebraic skills usually encountered in grades ten through twelve with which students have difficulty. Students are encouraged to explore and communicate ideas quantitatively. Students may be required to build physical models or detailed drawings of solutions to problems. Students will use the TI-84 Plus or TI-*n*spire calculators as well as other computer software as a tool in solving problems.

Assessment

Students are assessed based on daily class participation in discussions and activities. Pretests will be administered by the instructor to assess mathematical skills, and posttests will be used to identify growth and mastery of the concepts. If necessary, the instructor will provide recommendations on continued areas of study once the course is complete.

Drama and Theater

Objectives

Students will learn to:

- Project their voices to an audience
- Move on stage as part of a scene
- Critique performances of other students and accept constructive criticism of their work
- Prepare scenes for performance considering many aspects of the stage, including lighting, sets, mood, pace, movement, and rhythm
- Perform dramatic works on stage in front of an audience, which may or may not include musical accompaniment or song

Methods

This course is for students who want to improve their ability to act in plays, speak clearly in front of audiences, and to better understand the roles of music and movement in theatre. Students will be expected to learn and perform roles in several dramatic scenes, including at least two to be performed in front of the entire camp.

Assessment

Students will be assessed on their daily participation in class activities and their willingness to perform and achieve in the class.

Studio Art

Objectives

The students will learn to:

- Realistically draw a variety of subjects using pencil, charcoal, oil pastels and pen and ink
- Paint a realistic and abstract painting using the correct application of acrylic paint and scientific color mixing
- Use a variety of relief printing techniques, to create a series of non-objective prints based on the elements and principles of design
- Sculpt a ceramic piece based on a researched artifact
- Construct a collage that inspires socio-political or self-awareness

Methods

In this course, the students utilize a variety of media to improve their technical and creative abilities through the production of realistic, abstract, and non-objective art. The course is designed to begin or enhance a young artist's portfolio.

Assessment

Students will be assessed on daily participation in discussions and activities. Likewise, individual projects will be assessed based on the criteria set forth for each particular piece.