Department: IITS  
Position Reports To: Director of Academic Technology  
Working Title: GIS Specialist/Instructional Designer  
Classification: Info Technology Consultant - Career  
Job Code: 0420  
Range Code: 2  
Exempt or Non-Exempt: Exempt  
Last Update: 11/18/2021  
Position Number: 00000229  
Union / Unit (if applicable): CSUEU – Unit 9

PURPOSE OF POSITION:
The Instructional Development Services (IDS) team, within the Academic Technology unit in Instructional and Information Technology Services, supports all faculty seeking assistance with the development, maintenance, and upgrade of online instructional materials, online courses, and various software packages including Geographic Information Systems (GIS). Reporting to the Director of Academic Technology, the incumbent is primarily responsible for instructional support of faculty members and courses using GIS in addition to providing university-wide support for GIS by other units (e.g. Facilities Development & Management). The incumbent receives day-to-day operational direction from the Director and works with peers in the group to provide training and assist to faculty seeking assistance from IDS related to GIS, Learning Management System (LMS), and other assigned software and products. The incumbent is a member of a team of professionals who evaluate instructional content for best practices, perform training and assistance in the conversion of instructional materials, and support the activities related to online learning, Open Educational Resources (OER), and other instructional initiatives at CSUSM.

MAJOR RESPONSIBILITIES:
1. Instructional support for courses utilizing GIS  
   % of Time  
   50%  
2. Assist campus administrative units with the use of GIS  
   25%  
3. Assists faculty with LMS, and other programs and materials  
   15%  
4. Serves as a full member of the IDS team, attends meetings, and facilitate activities  
   10%

LIST OF TASKS FOR EACH MAJOR RESPONSIBILITY:

Instructional support for courses utilizing GIS
- Provides consultative and technical support services to faculty utilizing ESRI GIS software to ensure problem resolution, system/data access, and optimal system performance.
- Provides in-class instructional support for GIS software as requested and scheduled with faculty.
- Provides technical support to students who have courses using GIS.
- Develops instructional and/or research techniques using GIS.
- Assist faculty and students in acquisition and formatting of GIS databases.
- Provides telephone, email, and on-site support to faculty and academic department support staff.
- Conducts research and prepares technical justification for grants related to GIS.
- Monitors trends in GIS to assist faculty, staff, and administrators in the use of the technology.
- Responds in a timely manner to requests from faculty and students for GIS support via telephone, email, and on-site in Technology Resource Center (TRC).
- Create maps, charts, tables, graphs and graphics using GIS and related software. Identify attributes to be associated with mapped features and link to features as data are collected, surveyed or drafted.
- Develop and maintain geospatial databases. Conduct research to locate and obtain existing databases. Correct data to ensure highest degree of accuracy.

Assists faculty with LMS, and other programs and materials
- Provides consultative, technical, and instructional support of the LMS and other assigned instructional technology software and online tools to enhance and facilitate academic and educational objectives.
- Assists in writing user (faculty/student) documentation, user guides, instructor guides, training outlines, and technical training publications.
• Trains and assists faculty related to creating online course materials (may or may not be related to GIS) and uses of various online teaching and classroom tools as appropriate.
• Participates and assists in providing IDS training and communication materials to faculty that help to maximize their ability to create and maintain high quality GIS and other online learning materials.
• Assists with problem resolution assisting in providing access for faculty and students and works to optimize online tools and resources.
• As a member of the IDS team, shares in the general responsibility for the timely response to requests from faculty and students for support via telephone, email, and on-site in Technology Resource Center (TRC) (including nights and weekends when assigned).
• Coordinates activities with peers in IDS to assist faculty and students with problems accessing and using the LMS and other online tools.

Assist campus administrative units with the use of GIS
• Advises unit managers and collaborates with all campus divisions to identify and utilize GIS technology in their operations as appropriate.
• Assists university operations staff in utilizing GIS technology to document, track, and locate campus infrastructure.
• Creates maps that can be used by administrative units and the campus community.
• Helps improve facility infrastructure identification, planning, and management through the use of GIS.

Serves as a full member of the IDS team, attends meetings, and facilitate activities
• Attends team meetings and actively participates and supports all IDS activities, services and functions.
• Serves on committees and represents IDS with professionalism to the campus community.

PROVIDES LEAD DIRECTION OF OTHERS
• Student Assistants as needed

REQUIREMENTS OF POSITION:

1. List education and experience required
   Works at varying levels of independence and consults with peers as needed; has responsibility for the performance of their daily tasks/duties within operational and project guidelines or a directed.
   • Masters level degree in an instructional technology related field or Geographic Information Systems and relevant experience to demonstrate the knowledge, skills and abilities required of the position.
     -OR-
   • Bachelors level degree in a related field with two years of relevant full-time experience to demonstrate the knowledge, skills and abilities required of the position.
     -OR-
   • Associates level degree with five years of relevant full-time experience to demonstrate the knowledge, skills and abilities required of the position.
     -OR-
   • Seven years of relevant full-time experience to demonstrate the knowledge, skills and abilities required of the position.

Preferences:
• Two years of work experience in a higher education environment.
• Three years GIS experience
• Master’s degree

2. List additional knowledge, skills, and abilities required for this position
   • Functional/working knowledge of a specialty area demonstrated by an understanding and use of the general principles, practices, and skills pertinent to the specialty.
   • High level of expertise using computers, and thorough understanding of ESRI ArcGIS Pro, ArcGIS Collector, ArcGIS Survey123, or similar mobile and desktop GIS applications.
   • Knowledge of common principles, methods, and techniques related to GIS.
   • Basic programming skills for html, css, javascript, java, Python.
• Experience instructing students and faculty using GIS.
• Experience with and ability to collect, prepare, digitize and code spatial data into GIS format and convert GPS data into GIS datasets.
• Recognize problems, use reasoning and logic to establish possible causes, interprets and applies theories and principles, generates and evaluates alternative solutions, devises and implements a plan of action for the best resolution within organizational constraints. Develops solutions where precedents do not always exist. Demonstrated ability to successfully implement technology plans as a member of team.
• Demonstrated ability to analyze data requirements and research data availability and access methods, to ensure efficient use of available resources.
• Ability to coordinate and implement data exchanges and conversions to facilitate access to correct data for users.
• Demonstrated ability to outline problems, gather information and make recommendations. Able to be proactive demonstrated by recognizing needs, anticipating outcomes and consequences of different approaches and making necessary modifications to action plans to achieve desired results.
• Ability to assist others in completing assignments and to provide basic work direction.
• Able to plan and work on shared projects to achieve established objectives in a timely manner. Actively contributes to achievement of team goals and tasks.
• Demonstrated ability to effectively communicate with technical and non-technical users. Demonstrated competence at interpreting and communicating information, ideas and instructions. Able to select appropriate information and best method or format for presenting it. Able to train others on new skills and procedures.
• Knowledge of instructional design theories and methodologies and ability to apply them, as well as user interface design principles and applications, to provide a good theoretical grounding and enhance outcomes.
• Knowledge of and ability to independently evaluate instructional software, courseware development, and multimedia applications for appropriateness to instructional needs.
• Knowledge of instructional design and technology integration techniques, to be able to provide comprehensive solutions to learning problems.
• Knowledge of training theory and practices demonstrated by ability to develop and deliver technical training and user documentation.
• Excellent customer service skills.
• Demonstrated ability to work and communicate clearly with users to effectively identify and efficiently meet their requirements.
• Ability to apply consultative skills to assess user needs and provide appropriate support.
• Ability to independently analyze data requirements and research data availability and access methods, to ensure efficient use of available resources.
• Proficiency using campus standard software packages, including web page publishing, desktop productivity tools in the Microsoft Office suite, and graphics programs included in the Adobe Creative suite.
• Ability to coordinate and implement data exchanges and conversions to facilitate access to correct data for users.
• Ability to work with others in a team required to ensure efficiency and harmony in the development process.
• Ability to conduct research on instructional design and technology products/services and make appropriate recommendations to faculty based on best practices and input from appropriate stakeholders.
• Excellent communication skills and the ability to work effectively with faculty, administrators, staff, and students.
• Effective writing and presentation skills; interpersonal and communication skills in working with faculty to interpret needs and provide appropriate solutions.
• Ability to apply consultative skills to assess faculty and student needs and provide appropriate support.
• Ability to analyze data requirements and research data availability and access methods.
• Ability to independently solve a wide range of complex problems and develop practicable solutions.
• Demonstrated competence in independently applying judgment to standard and non-standard situations.
• Ability to interact effectively and sensitively with diverse groups of individuals at various levels.
• Knowledge and experience evaluating online instructional materials and tools for conformance with CSU adopted standards (QOLT & QM).
• Knowledge of typical higher education learning and online content systems and multimedia environments, access procedures, and experience with Moodle, Blackboard or Canvas.
• Knowledge and experience identifying and providing guidance and recommending solutions to faculty regarding accessibility barriers related to electronic materials and online tools.
• Ability to develop and create computer-based multimedia/video productions.
• Experience with creating/editing graphics and program marketing materials.
• Knowledge of statistical software and/or research databases.
- Experience in the use of IT/Help Desk ticket tracking systems.
- Strong project management skills and the ability to establish and document operational procedures.
- Basic experience with photo editing software.

3. **List machines, tools, equipment, and motor vehicles used in the performance of the duties**

   - Computer equipment – Microsoft/Windows and Apple/Macintosh environments.
   - Smart phones and tablets.

4. **Unique working conditions**

   - This position may require weekend or off-hours work in order to respond in a timely manner to faculty and staff inquiries for assistance. This is shared responsibility of all group members.

5. **Other Employment Requirements**

   - The person holding this position is considered a ‘mandated reporter’ under the California Child Abuse and Neglect Reporting Act and is required to comply with the requirements set forth in CSU Executive Order 1083 Revised July 21, 2017 as a condition of employment.
     - Limited Reporter
   - This position is subject to a background check including, but not limited to, employment verification, education verification, reference checks and criminal record checks. Failure to satisfactorily complete the background check may affect the application status of applicants or continued employment of current CSU employees who apply for the position.
   - Must participate in required campus trainings including, but not limited to, Information Security Awareness Training and Sexual Violence Awareness and Prevention “EDU: Eliminate Campus Sexual Misconduct”.

**PURPOSE AND NATURE OF WORK RELATIONSHIPS:**

Define working relationships with people on and off campus (other than supervisor or people supervised) with whom this employee interacts on a continuing basis, and how often this interaction occurs.

**Faculty – Daily**

Responds to requests for assistance primarily related to the use of the ESRI GIS software. Collaborates with faculty on the development of GIS instructional materials and assists both faculty and staff in providing GIS technical assistance and performs both formal and informal consultation and training.

**Students – Daily/Weekly**

Responds to requests for assistance primarily related to access and use of the ESRI GIS software application.

**IDS – Daily**

Position works closely with peers in Instructional Development Services to assist faculty in creating training programs or providing general support. Assists in providing accessible materials and consults regularly with peers in all areas to seek advice, guidance and assistance.

**IITS – Daily/Weekly**

Attends department meetings, serves on committees and working-groups, reads and responds to electronic and hard-copy correspondence, meets timelines, and responds to requests for assistance.

**Vendors and Off-Campus Parties – Weekly**

Communicates and responds to requests via email, web, telephone, or in person to appropriate requests for assistance and information.
PHYSICAL EFFORT:

Check the appropriate box for each of the following items which most accurately describes the extent of the specific activity performed by this employee on a daily basis.

<table>
<thead>
<tr>
<th></th>
<th>Number of hours/day</th>
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<tbody>
<tr>
<td></td>
<td>N/A  1-2  3-4  5-6  7+</td>
<td>N/A  1-2  3-4  5-6  7+</td>
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<tr>
<td>1. Sitting</td>
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<td>12. Lifting or carrying</td>
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<tr>
<td>2. Standing</td>
<td>X</td>
<td>A. 10 lbs or less</td>
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<td>3. Walking</td>
<td>X</td>
<td>B. 11 to 25 lbs</td>
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<tr>
<td>4. Bending Over</td>
<td>X</td>
<td>C. 26 to 50 lbs</td>
</tr>
<tr>
<td>5. Crawling</td>
<td></td>
<td>D. 51 to 75 lbs</td>
</tr>
<tr>
<td>6. Climbing</td>
<td>X</td>
<td>E. 76 to 100 lbs</td>
</tr>
<tr>
<td>7. Reaching overhead</td>
<td>X</td>
<td>F. Over 100 lbs</td>
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<tr>
<td>8. Crouching</td>
<td>X</td>
<td>13. Repetitive use of</td>
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<tr>
<td>9. Kneeling</td>
<td>X</td>
<td>hands/arms</td>
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<tr>
<td>11. Pushing or pulling</td>
<td>X</td>
<td>legs</td>
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<td></td>
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<td>15. Eye/hand coordination</td>
</tr>
<tr>
<td>16. Driving cars, trucks, forklifts and other equipment</td>
<td>X</td>
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<td>17. Being around scientific equipment and machinery</td>
<td>X</td>
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<td>18. Walking on uneven ground</td>
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MENTAL EFFORT

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<td>N/A  1-2  3-4  5-6  7+</td>
<td>N/A  1-2  3-4  5-6  7+</td>
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<tr>
<td>1. Directing others</td>
<td>X</td>
<td>1. Inside</td>
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<td>2. Writing</td>
<td>X</td>
<td>2. Outside</td>
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<td>3. Using math/calculations</td>
<td>X</td>
<td>3. Humid</td>
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<td>4. Talking</td>
<td>X</td>
<td>4. Hazards</td>
</tr>
<tr>
<td>5. Working at various tempos</td>
<td>X</td>
<td>5. High places</td>
</tr>
<tr>
<td>6. Concentrating amid distractions</td>
<td>X</td>
<td>6. Hot</td>
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<tr>
<td>7. Remembering names</td>
<td>X</td>
<td>7. Cold</td>
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<tr>
<td>8. Remembering details</td>
<td>X</td>
<td>8. Dry</td>
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<tr>
<td>10. Working rapidly</td>
<td>X</td>
<td>10. Change of temp</td>
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<td>11. Examining observing details</td>
<td>X</td>
<td>11. Dirty</td>
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<td>12. Discriminating colors</td>
<td>X</td>
<td>12. Dusty</td>
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<td>13. Odors</td>
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<td>14. Noisy</td>
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<td>15. Working w/others</td>
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<td>16. Working around others</td>
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<td>17. Working alone</td>
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SIGNATURES

The last sheet for any staff position description should contain the signature sheet. Signatures will include the incumbent’s signature (if applicable) or new employee; the supervisor’s signature and all pertinent administrative personnel.

**Employee**

Print Name: ______________________________________________

Signature: ____________________________  Date: ____________________________

**Appropriate Administrator (MPP)**

Print Name: ______________________________________________

Signature: ____________________________  Date: ____________________________

**Dean/Department Head/Director/AVP (optional)**

Print Name: ______________________________________________

Signature: ____________________________  Date: ____________________________