# Lewis & Clark Graduate School of Education and Counseling



"We are a community that commits itself to

diversity and sustainability as dimensions of a just

society" -- Lewis and Clark Mission Statement

# MCFT 530 Research Methods and Systemic Practice (2 units)

### SPRING 2021

Instructor:Joslyn Armstrong, Ph.D.Time & Day:Section 1-Mondays 1:00pm-4:00pm<br/>Section 2- Mondays 9:00am-12:00pmLocation:On ZoomOffice Hours:by appointment via email.

### **CATALOG DESCRIPTION**

This course addresses the essential concepts related to research design and methodology that systems/relational practitioners need to become critical evaluators of research and prepare for conducting research in their own practices, with an emphasis is on becoming an informed consumer of research and evidence-based practice. Students learn to apply research with critical awareness of the links between the process of inquiry, construction of knowledge, and cultural equity. Focus is on understanding each component of the research process, qualitative and quantitative designs, program evaluations, measurement issues and data analysis as well as the legal, ethical, and contextual issues involved in the conduct of clinical research and program evaluation.

**Prerequisites:** None **Credits:** 2 semester units (30 hours contact)

### MCFT STUDENT LEARNING OUTCOMES

This course promotes the following student learning outcomes:

**SLO 3.1** Students are able to discern the implications of the sociopolitical context within which research is produced and applied.

SLO 3.2 Students draw on the research literature relevant to family therapy in case planning.

### **COURSE OBJECTIVES**

As a result of this course students will:

- 1. Understand research and program evaluation methodologies, both quantitative and qualitative, relevant to MFT and mental health services.
- 2. Understand the legal, ethical, and contextual issues involved in the conduct of clinical research and program evaluation.
- 3. Recognize informal research processes involved in therapy, own biases relative to research.
- 4. Know the extant MFT literature, research, and evidence-based practice.
- 5. Read current MFT and other professional literature and use the literature to inform clinical practice.
- 6. Critique professional research and assess the quality of research studies and program evaluation in the literature.
- 7. Evaluate knowledge of current clinical literature and its application.
- 8. Recognize how epistemological assumptions and sociopolitical context of research affects research questions, design, implications, and application of research.

### **LEARNING IN THE CONTEXT OF COVID-19**

Things are not normal. We are in the midst of a global public health crisis and sociopolitical unrest, and there have been both direct and indirect impacts on individuals, families, and communities. Each of us are also experiencing individual differences in the degree to which we can access resources to manage these crises, based on our unique intersecting identities.

Yet, we are intentionally choosing to show up in an academic and professional capacity for the purpose of learning and developing as therapists-in-training during this unprecedented time. Thus, we need to try and approach our work with understanding and compassion for ourselves and for each other. We also need to reflect on how we navigate this crisis context – how we attempt to cope (or don't), how we attempt to connect (or don't), and how we adapt and face uncertainty. As we continue to learn and grow in our academic, professional, and personal capacities, we must also invest appropriately in caring for ourselves so that we can be help sustain one another.

The current crisis will continue to challenge, change, and shape the new norms in the sociopolitical, cultural, professional and personal contexts of our lives. Many things remain uncertain. But, over time, we will collectively construct some sense of predictability into the future. So, with that said, please know that there may be instances where we will need to adjust the course format, assignment deadlines, and reading schedule to adjust to the ever-changing circumstances. As the instructor, I will do my best to communicate transparently and in a timely manner about what you should anticipate in the course and any changes we need to make.

Because this course is designed to pilot the hybrid format, there are some class meetings where those who wish to be on campus will be in the classroom, while those who wish to take the

course fully online will connect via Zoom. Because of the inherent limitations of technology and the complexities that social distancing guidelines pose, class in a hybrid format might not work out. It may also simply be irresponsible for us to take the risk of congregating in-person. We'll assess and make decisions together. One approach is that after trying this format, as a class, we can assess whether/if/how it is working for us and collaboratively decide whether to continue or simply move all class meetings fully online. We'll discuss this further when we meet.

Regardless of whether class meetings are hybrid or fully online, everyone will be required to:

- 1. Have access to a personal computer at home
- 2. Have a set of personal headphones with a built-in microphone

3. Be able to access stable, high speed internet connection (cable modem, DSL recommended)

- 4. The most current version of Zoom downloaded as an application to your computer
  - a. Download Zoom https://zoom.us/download
  - b. Sign in with your Lewis & Clark email account
  - c. For help and troubleshooting with Zoom, visit the Zoom Help Center: https://support.zoom.us/hc/en-us
- 2. Be able to access course material uploaded to Moodle
- 3. For every class, please be logged into Moodle and Google email address
- 4. Check email on a daily basis
- 5. Be able to access programs to Google suite and Microsoft Office
- 6. Commit to the time required to prepare for class
- 7. Demonstrate self-motivation and self-discipline.

**Guidelines for this Zoom online course.** Each instructor structures online learning somewhat differently. In this class:

- You may log into the "classroom" early. Come five or ten minutes early and chat with each other. Instructor will not listen to your pre-class conversation, even if logged in.
- Open your video so we can all see each other. You are NOT required to have your video on during virtual classroom. However, you must continue to participate in class breakout rooms and discussion in speaking or participating in the chat or polling questions.
- Mute your sound when you are not speaking, except in small breakout groups.
- Use the *gallery view* in Zoom during class discussion. When the instructor or a student is presenting, switch to *speaker view*.
- Wave your hand when you want to speak. Feel free to assist the instructor in noticing if someone wants to speak and has been missed.

- Use the chat room function to share your thoughts or perspective about class material during class discussion if you cannot find an optimal time to jump into discussion
- Glitching? Sign out and sign back in.
- Take turns talking (be aware of other potential speakers)
- Listen and respond to each other (use names when appropriate)
- Be mindful of on camera/muted talking
- Try to arrange your screen to best convey active listening
- Engaged and Active--we make the class for each other!

### **COVID POLICY**

Please read and carefully review LC's guidelines for reopening at

https://www.lclark.edu/news/2020-plans/health-and-safety/

**In the event of Dr. Armstrong contracting COVID-19:** If Dr. Armstrong were to exhibit symptoms of the Coronavirus, then class will resume in an online format. In the event of Dr. Armstrong's death due to Coronavirus, all direction and teaching of the course will be at the discretion of Dr. Kim (Program Director) and the MCFT faculty.

### **REQUIRED TEXTS:**

- Creswell, J. & Poth, C. (2017). Qualitative inquiry and research design: Choosing among five traditions (4<sup>th</sup> Ed). Thousand Oaks: Sage. ISBN: 9781506330204
- Williams, L., Patterson, J., & Edwards, T. M. (2014). Clinician's guide to research methods in family therapy: Foundations of evidence-based practice. Guilford Publications. ISBN: 9781462515974

### **SUPPLEMENTARY TEXTS:**

- American Psychological Association (2019). *Publication manual of the American Psychological Association*. (7<sup>th</sup> Ed.). Washington, DC: American Psychological Association.
- Lebow, J. (2018). *Research for the psychotherapist: From science to practice*. New York, NY: Routledge.
- Merriam, S. B., & Tisdell, E. J. (2016). Qualitative research: A guide to design and implementation. (4<sup>th</sup> Ed.). San Francisco, CA: Jossey-Bass.

Mertens (2019. *Research and evaluation in education and psychology. Integrating diversity with quantitative, qualitative and mixed methods.* (5<sup>th</sup> Ed). Thousand Oaks, CA: Sage.

**Communication:** If you would like to schedule a face-to-face meeting, then <u>please feel free to</u> <u>email me for an appointment.</u> If you send an email to me, you can expect an answer in about 24 hours during the week. Generally, if you email me during the weekend, it is best to assume that I will not respond until Monday morning.

### **OVERVIEW AND EXPECTATIONS**

#### My Commitment to You:

I am committed to assisting you by creating a respectful and professional learning environment to be able to learn critical course material over the semester. I encourage you to discuss the course content with me any time during the semester. I am available by appointments only via email. I also encourage you to offer your feedback throughout the course. I highly value your input.

#### **Responsibilities of the Student:**

This course will require due diligence on the student's behalf. Student must read assigned chapters and review all supplemental material provided on Moodle, or via email. You will be held responsible for knowing any changes made to the class schedule, weekly reading materials, or class assignments that will be in the announcements on Moodle or via email. In order to earn a satisfactory score in this course, the student must complete all assignments and readings, and remain engaged in the virtual classroom format. Remember you are the sole owner of your academic experience; you must take responsibility for everything you do or not do in this course.

Course Objective	MCFT Student Learning Outcomes	AAMFT Core Competencies & AMFTRB task statements	Evaluated by
1. Understand research and program evaluation methodologies, both quantitative and qualitative, relevant to MFT and mental health services.	SLO 3.1 SLO 3.2	CC 6.1.2	Qualitative Research Study IRB Application
2. Understand the legal, ethical, and contextual issues involved in the conduct of clinical research and program evaluation.	SLO 3.1 SLO 3.2	CC 6.1.3	Qualitative Research Study IRB Application
3. Recognize informal research processes involved in therapy, own biases relative to research.	SLO 3.1 SLO 3.2	CC 6.2.1	Researcher Positionality Statement
4. Know the extant MFT literature, research, and evidence-based practice.	SLO 3.1 SLO 3.2	CC 6.1.1 CC 6.3.1	Qualitative Research Study IRB Application

5. Read current MFT and other	SLO 3.1	CC 6.3.1	Qualitative Research
professional literature and use the	SLO 3.2	CC 6.3.2	Study
literature to inform clinical practice.			
			IRB Application
6. Critique professional research and	SLO 3.1	CC 6.3.3	Qualitative Research
assess the quality of research studies	SLO 3.2		Study
and program evaluation in the			
literature.			IRB Application
7. Evaluate knowledge of current	SLO 3.1	CC 6.4.1	Qualitative Research
clinical literature and its application.	SLO 3.2		Study
			IRB Application
8. Recognize how epistemological	SLO 3.1	CC 6.1.2	Qualitative Research
assumptions and sociopolitical		CC 6.1.3	Study
context of research affects research		CC 6.3.1	
questions, design, implications, and		CC 6.3.3	Researcher
application of research.		CC 6.4.1	Positionality statement

### **COURSE ASSIGNMENTS AND EVALUATION**

This class will emphasize learning by doing. Students will actively engage in reading family therapy-related research, reflect on the research design process and the context in which findings were created, and consider implications for practice. Your course grade will be based the following assessments.

### **CLASS ATTENDANCE**

Because class participation and discussion are essential for your learning, regular attendance is expected for this course. Students are expected to virtually attend class regularly and be on time. Participation is counted as involvement in class and in class assignments. Therefore, it is imperative that you attend class unless otherwise informed by Dr. Armstrong. In the event you are absent, it is your responsibility to bring in documented information that is considered University worthy. Only the days indicated on the excuse will be accepted as verification of an excused absence. There will be no makeup assignments given for missed class sessions. Skype or zoom call-ins as makeup attendance will not be allowed for any reason. Distracting behavior in class is unacceptable and will not be tolerated. Other unacceptable behaviors include arriving late or leaving early, except in cases when there is a valid reason for doing so.

### 1. CLASS PARTICIPATION (10 points)

All assigned readings must be completed in advance of the class in which they are to be discussed. Every student is responsible for coming to class prepared to participate in a meaningful discussion. Classroom group discussions are opportunities to bring up questions about the assigned readings, further your understanding of the concepts in lectures, integrate course material into your understanding of research, and integrate material into your clinical practice. Thus, students are expected to read all required readings and supplemental readings and actively participate in class discussions and small group activities.

#### a. JEOPARDY QUESTION SUBMISSION (up to 2 points)

Students will be required to submit a qualitative and quantitative research question from the course material to Dr. Armstrong for the two Jeopardy games. The purpose of the Jeopardy games is to test students on their knowledge and consumption of the course material on qualitative and quantitative research methodologies. The students will be separated into groups to compete for 1-point extra credit added to their total points.

#### b. TERMINATION OF DATA AGREEMENT FORM (1 point)

At the end of the course, students will be required to submit the Termination of data agreement form on Moodle. The agreement form certifies that at the conclusion of the course, all groups and their members will permanently delete all raw and deidentified data from their records. Students will not have Lewis & Clark College IRB approval for human subjects research, thus for the protection of all involved, they will need to permanently delete all files associated with the research study for the course. Students will sign the agreement stating they have permanently deleted all files at the end of the course. Dr. Armstrong will determine the impact on any student's grade for the course, if students who do not sign the agreement by the end of the course.

### 2. RESEARCHER POSITIONALITY STATEMENT (10 points)

Students will complete a researcher positionality statement. The purpose of the positionality statement is to for students to explore their own social identities, values, biases, and prejudices prior to data collection for their research study. Students are expected to discuss their relationship with research, perceptions of research, and how these informs their positionality in their corresponding research study. In completing this assignment, students will be more aware of how they are positionality statement are below. The researcher positionality statement will be maximum 2 pages, double-spaced, 12-point font, Times New Roman, Word document format. The assignment is due on Moodle by 11:30pm. Late papers will receive a deduction of points based on the guideline provided below.

- 3. IRB APPLICATION (30 points)- Students will work with their research study groups to complete an IRB application and informed consent form for their research study topic area. Groups will be expected to compose an application that addresses the areas of: research purpose, research background, methodology, research design, data analysis, and include an informed consent form. The IRB application must be no more than 5 pages, 12-point font, Times New Roman, a Word document format, and 7<sup>th</sup> edition APA format and references. Any suspicions of violations to the Academic Integrity policy will be reported (please review the policy below). A rubric for the assignment is attached below. There is a 10% deduction for every day that the paper is late for late assignments. The assignment is due on Moodle by 11:30pm.
- 4. **QUALITATIVE GROUP RESEARCH STUDY (50 points)** Students will work in groups of 3 to conduct a qualitative research study for the course. Groups will choose a research topic, research questions, and create a semi-structured interview guide with 3 questions, and 3 probing questions. Groups will conduct interviews with 3 participants, transcribe those

interviews, and code the transcripts. Groups will submit a finalized write-up of their research study. The chosen research area must have implications to the MFT field and have a discussion on what MFT therapists can learn from the study. The qualitative group research study paper will be no more than 10 pages (without title page, TOC, and references), double-spaced, 12-point font, Times New Roman, a Word document format, with 5-7 peer-reviewed journal articles, and 7<sup>th</sup> edition APA format and references. Any suspicions of violations to the Academic Integrity policy will be reported (please review the policy below). Guidelines for the assignment rubric are detailed below. There is a 10% deduction for every day that the paper is late for late assignments. The assignment must be submitted on Moodle and Taskstream by 11:30pm.

#### **EVALUATION AND GRADING**

Class Participation	10
Researcher Positionality Statement	10
IRB Application	30
Qualitative Research Study	50
Total	100
Final Grading	

A = 93-100%	A-=90-92%
B+=88-89%	B = 83-87%
B-=80-82%	C+=78-79%
C = 73-77%	C-=70-72%

According to Graduate School policy, grades lower than B- may not apply to graduation. Students earning a C+ or lower will need to repeat the course.

Late papers and assignments: Any assignments turned in late (without previous permission) will automatically receive a 10% reduction in grade for every day late.

### **CPSY DEPARTMENTAL ATTENDANCE POLICY**

Class attendance is expected and required. Any missed class time will be made up by completing extra assignments designed by the instructor. Missing more than ten percent of class time may result in failure to complete the class. This would be 4.5 hours of a 45 hour class (3 credits), 3.0 hours for a 30 hour class (2 credits) or 1.5 hours for a 15 hour class (1 credit.) In case of extreme hardship and also at the discretion of the instructor, a grade of incomplete may be given for an assignment or the entire course. In such cases, the work to be submitted in order to remove the incomplete must be documented appropriately and stated deadlines met. Students are expected to be on time to class and tardiness maybe seen as an absence that requires make-up work.

### DISABILITY SERVICES STATEMENT

- Option 1: If you have a disability that may impact your academic performance, you may request accommodations by submitting documentation to the Student Support Services Office in Albany Quadrangle (503-768-7192). After you have submitted documentation and filled out paperwork there for the current semester requesting accommodations, staff in that office will notify me of the accommodations for which you are eligible.
- Option 2: If you require academic accommodations please contact the Student Support Services Office in Albany Quadrangle (503-76-7192 or access@lclark.edu). Once you complete the intake process and the Accommodations Agreement, you may Request to Send your Accommodations Letter. Student Support Services staff will then notify faculty of the accommodations for which you are eligible.

# DISCLOSURE OF PERSONAL INFORMATION

Each student should decide for him/herself what information to disclose. Students are advised to be prudent when making self-disclosures. The program cannot guarantee confidentiality of student disclosures given the group environment, although personal comments should be considered private and confidential – and remain only in the classroom – unless an exception to confidentiality applies.

# LINKS TO LEWIS & CLARK GRADUATE SCHOOL ESSENTIAL POLICIES

This course adheres to the general policies outlined in the catalog and student handbook of the Lewis & Clark Graduate School of Education and Counseling. This includes full adherence to the following policies:

- Nondiscrimination: <u>go.lclark.edu/gsec-nondiscrimination;</u>
- Standards for professional student conduct and academic integrity: <u>go.lclark.edu/gsec-conduct;</u>
- Sexual misconduct: <u>go.lclark.edu/titleIX</u>.

# **CELL PHONES**

Cell phones must be silenced/remain off, and text messaging is not allowed during class time. If there is an emergency that requires your immediate attention, please mute your video to take the call.

# SYLLABUS CHANGE POLICY

Except for changes that substantially affect implementation of the evaluation (grading), this syllabus is a guide for the course and is subject to change with advance notice throughout the semester.

# COURSE STRUCTURE AND SCHEDULE

\*Any changes to the reading schedule will be announced at least 24 hours prior\*

Session	Day	Date	Lecture Review	Readings
1 Thurs	Jan.	Introductions & Syllabus Review	<b>C</b> : Ch. 2-3	
		14th	Lecture: Choosing a Research Topic & Group	
			Assignment, Forming a Research Question	
2	Thurs	Jan.	Lecture: IRB application, & Informed Consent, &	Α
		21st	Social Justice and Research	
3	Thurs	Jan.	Lecture: Qualitative Research- Introducing the 5	<b>C</b> : Ch. 1, 4, 7-8
		28th	Approaches	Α
			Guest Speaker: Elaine Hirsch, Watzek Librarian	
			Assignment: IRB Application due on Moodle by	
			11:30pm	
4 Thurs Fe		Feb.	Lecture: Qualitative Research- Introducing the 5	<b>C</b> : Ch. 1, 4, 7-8, 10
•	11015	4th	Approaches & Ethics	
5	Thurs	Feb.	Jeopardy Game	
0	11015	11th	Check-in: Meet with Dr. Armstrong	
			Assignment: Researcher Positionality Statement due	
			on Moodle by 11:30pm	
6	Thurs	Feb.	Lecture: Transcribing and Coding Qualitative	Α
0	1 maris	18th	research	
7	Thurs	Feb.	In class Work Day	
,	1 maris	25th		
0	There		<b>Lecture:</b> Quantitative Research- the Basics; & Ethics	W. Ch 2 5 0 11
8	Thurs	March		W: Ch. 2, 5, 9-11
		4th		Α
9	Thurs	March	Jeopardy Game	
,	Inuis	11th	Check-in: Meet with Dr. Armstrong	
10	Thurs	March	<b>Lecture:</b> Working with Marginalization populations	Α
10	Inuis	18th	Assignment: Qualitative Group Research Study due	Α
		1000	on Moodle & Taskstream by 11:30pm;	
			Termination of Data Agreement form due on Moodle	
	1		by 11:30pm	

Reading Abbreviations: **W** – Williams et al., 2014; **C** – Creswell & Poth, 2018; **A**: Online Article(s)

#### **Researcher Positionality Statement (10 points)**

Throughout the course of this class and beyond you will explore your own positionality as an researcher. This process encompasses exploring your own histories, biases, identities, and desires for change. Your researcher positionality statement will serve as a guide for you to understand how you come to the research and why. As you develop your research skills and knowledge it is expected that your positionality will shift. Before you begin this assignment, it is imperative that you read the *Milner (2007)* article that is assigned during week 2 of this course. This is an exercise for you to think critically about the types of research you want to conduct (methods and methodology) but also how you are approaching your research topic (what assumptions have you already made?). Positionality statements should be no more than 2 pages double space double-spaced, 12-point font, Times New Roman, Word document format. The assignment is due on Moodle by 11:30pm. Late papers will receive a deduction of points based on the guideline provided below.

IRB Application Rubric	Possible points	Points demonstrated
IRB Application Evaluation Criteria:		
Presented a brief but concise relevant literature review for the research background	5	
Included a list of relevant databases and keywords in the application	5	
Presented a plan to maintain confidentiality and/or anonymity, and risk level	5	
Presented a reasonable research design and data analysis plan	5	
The informed consent form included all relevant sections and was concise	5	
Writing style is clear and concise. No grammar or APA citation errors. No formatting errors. Assignment meets 5 maximum page length requirements.	5	
TOTAL	30	

# **IRB** Application Assignment (30 points)

#### **Qualitative Group Research Study Rubric**

Student Research study groups are expected to conduct a qualitative research study on a topic of interest with a population of interest. The research study must have 3 interview questions, 3 probing questions for 3 participants. The sample must be 18 years and older, and cannot be vulnerable populations such as children, pregnant persons, or incarcerated people. Students will be conducting recorded interviews with participants and producing a transcript for coding for major themes. Each group will submit a final draft of their research study at completion of the course. The peer-review journal articles must be within 5 years from 2020 to be included in the final paper, according to Dr. Armstrong's discretion. The final paper will be <u>no more than 10 pages</u> (without title page, TOC, and references), <u>double-spaced</u>, <u>12-point font</u>, <u>Times New Roman</u>, a Word document format, with 5-7 peer-reviewed journal articles, and 7<sup>th</sup> edition APA format and references. Any suspicions of violations to the Academic Integrity policy will be reported (please review the policy below).

	0 = Did not meet	5 = Somewhat meet	10 = Meets
	Expectations	Expectations	Expectations
Introduction/Problem Statement	Section is mostly missing or incomplete, and unclear, or unconvincing.	Identifies a gap in the literature but not why the gap should be filled. Purpose of study was clearly written and identifiable. Included all the terms we need to know to understand the research study. Paradigm is given but not applied to project. Importance to field is vague with little to no connection to MFT field, little mention of broader systemic factors.	Provides a convincing argument as to why the research should be conducted. Provide a clear rationale for the paradigm used and how it applies to the group project. Clearly explains the importance to the field and clearly connects how clinicians can use the information gained in the clinical room and in their practice. Also has systemic implications.
Literature Review	Does not address every aspect of the section. Does not provide a clear or relevant review of other studies. Inadequate synthesis and summary of literature. No or weak case is made for the importance of the study.	Review includes irrelevant details or is not clearly related to presented research study. Somewhat clear and concise synthesis and summary of literature. The arguments in the literature review are poorly empirically supported.	Gives a short but meaningful review of three other relevant studies. Makes a clear argument for why the project is important. Adequate and empirically supported synthesis and summary of literature. Makes a detailed argument in literature review.
Methodology	Does not include qualitative aspects	Provides general qualitative aspects of	Provides detailed qualitative aspects of

	of design. Is	design. Mostly clear	design and has them
	incomplete or	presentation of research	integrated in a
	unclear in research	questions. Addresses	meaningful way.
	design, sampling,	most of the aspects of	Clearly presented
	and procedure.	the section. Somewhat	research questions.
	Incorrect	clear and adequate in	Clear and complete
	application of	detailed description in	detailed description in
	concepts.	research design,	research design,
		sampling, and	sampling, and
		procedure.	procedure.
Results & Findings	Section does not	Section generally	Section clearly and
C	clearly and	connected how	adequately connected
	concisely or	findings/conclusions	how
	minimally address	are informed by	findings/conclusions
	how	previous literature.	are informed by
	findings/conclusions	Results section	previous literature.
	are informed by	minimally discusses the	Results section clearly
	previous literature.	data, does not provide	and concisely uses the
	Does not include a	clear and concise	data in section. Clear
	results section with	examples from data in	and empirically
	information from	section. Somewhat	supported
	the data. Does not	clear summarization	summarization and
	clearly summarize	and synthesis of	provides a thorough
	and synthesize	previous literature,	synthesis of previous
	previous literature,	does address gaps, and	literature, clearly
	address gaps, or	provide a conclusion.	addresses gaps, and
	provide a	provide a conclusion.	provide a conclusion.
	conclusion.		provide a conclusion.
APA format, citation,	The writing style is	The writing style is	The writing style is
References page	not clear, has many	somewhat clear, has	clear and concise, has
	grammar errors and	several grammar errors and APA citation	few grammar errors
	APA citation errors.		and APA citation
	The assignment was	errors. The assignment	errors. The assignment
	over the page limit	was over the page limit	meets the page limit
	requirement.	requirement.	requirement.
Total: 50			